



## CITY OF WATERLOO **URBAN DESIGN MANUAL**

### PART I. **INTRODUCTION**

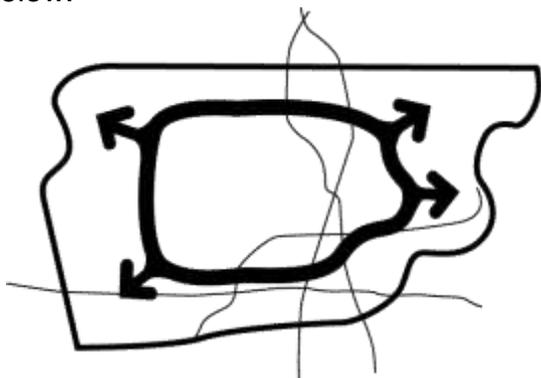
The City of Waterloo is **committed** to a high standard of *urban design* as established through the City’s Official Plan policies, its urban design guidelines and investment in the public realm. At the broadest level, the City’s Urban Design policies establish the primary design objectives and priorities for the City, which in turn, are to be further defined and implemented through City urban design guidelines. The Urban Design objectives for the City are:

- promoting a high standard of urban design;
- respecting Context and promoting a sense of place;
- enhancing connectivity and intersection;
- promoting creativity and innovation; and
- encouraging sustainable design.

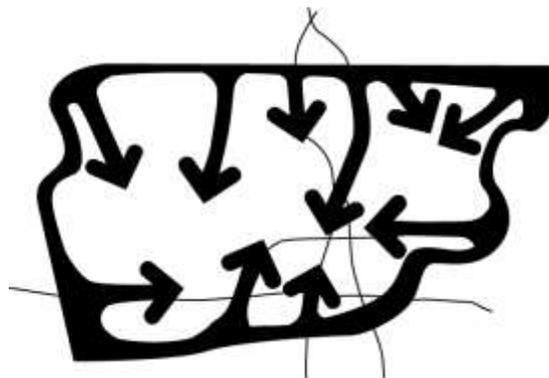
The primary design guidelines for the City are in the **Urban Design Manual** (the “UDM”), a consolidated set of city design guidelines and reference material including:

- General City Design Guidelines that apply to many types of development in the public and private realm;
- Supplemental Design Guidelines (more specific guidelines) for select areas in the City and for specific types of development; and,
- Process guidelines and technical standards for the Site Plan review process.

The UDM has been prepared in context of a number of initiatives and events which are transforming Waterloo from a spatially dispersed city to a more compact city illustrated below.



*For many years Waterloo was planned and developed as a spatially dispersed city with a suburban built form.*



*Through the Height and Density Policy Study, and with limited green field sites, the City is transitioning to a compact city through intensification.*



The City of Waterloo is *intensifying* and requires new tools to facilitate this type of development in context of preserving existing stable neighbourhoods. In this regard, the UDM has been prepared to facilitate compatible development that sympathetically responds to the surrounding context and to promote a more sustainable, context sensitive and human approach to development.



*Adaptive re-use has occurred in older buildings.*



*High-rise development is locating along major corridors.*

The UDM provides a contemporary (design-based) approach to development review and approvals. The City has introduced criteria and standards to implement its policies and shall use the design guidelines as a component for development approvals with emphasis on the Site Plan review process. The UDM is a multi-purpose document and has been prepared for a specific set of users and audiences including:

- **City Council:** The UDM provides Council approved urban design guidelines that help implement the City's Official Plan and express Council's design aspirations for site development across the City.
- **Development Industry:** The primary user of the UDM is the development industry including developers, professional consultants and City staff. City staff will use the UDM in the review and approval of development applications with emphasis on Official Plan/Zone Change Applications, Site Plan Applications and Committee of Adjustment Applications. The City will also identify the primary design priorities to development proponents during pre-consultation meetings. The development industry is responsible to demonstrate how development applications conform to the City's design policies and design guidelines.
- **External Agencies and Committees:** The UDM direct users (through "Guidelines Tips" or "Reference" notations) to other external agency and relevant committee processes and clearances that form part of the development review process. The UDM also establishes the City's design priorities and should be considered by others as well.
- **The General Public:** The UDM has been prepared with a Communications Brochure (attached in **Appendix A**) to provide a basic summary of the UDM and role in the development review process. Staff will forward a copy of this Brochure to public inquires regarding the development approval process and the City's commitment to achieving a high standard of urban design.

In summary, the City of Waterloo supports high quality development and public space investments that contributes to a memorable, innovative and livable city. The UDM provides strategies and techniques to achieve this vision.

## 1.1 Purpose

The primary purpose of the UDM is to implement the City’s Urban Design Objectives and Policies through the development review process and for select public realm improvement projects. In addition to this, the UDM has been prepared to:

- Meet the strategic objectives of the City of Waterloo as it relates to fostering equity and social inclusion, demonstrating continued leadership in the areas of environmental stewardship and sustainability, advancing safer and low carbon transportation solutions, planning for a robust and diversified economy, and focusing on innovative, healthy, and resilient neighbourhoods and intensification areas;
- Implement the Height and Density Policy Study recommendations by providing a consolidated set of guidelines for site plan projects in the City;
- Provide more effective and design focused guidelines for select areas in the City and for specific types of development that require greater attention;
- Establish design priorities early in the review process (pre-consultation stage);
- Establish tangible design criteria for the development review process;
- Facilitate a more coordinated and integrated Site Plan review and approval process;
- Clarify design expectations for building elevation review in response to Bill 51 Planning Act reforms;
- Respond to emerging trends and patterns such as tall building design and heritage conservation;
- Promote urban design awareness and education, and;
- Promote creativity and innovation.

## 1.2 Design Objectives

The UDM is based on specific policy objectives established in the Urban Design section of the City’s Official Plan. The Urban Design Objectives provide a policy basis for the UDM and the City’s design guideline implementation. A brief summary of the Urban Design objectives is provided below and further clarified in each section of the UDM:

- **To Promote A High Standard of Urban Design:** The City supports a high standard of urban design for all projects in the City with emphasis on compatible development, pedestrian-friendly design and other functional aspects of design and development that contributes to a high quality of life.
- **To Respect Context and Promote Sense of Place:** A fundamental objective for any new project is to identify, evaluate and recommend design solutions that respect and enhance the surrounding context with emphasis on neighbourhood character and contributing towards a sense of place or strong identity.



- **To Enhance Connectivity and Interaction:** Another fundamental objective for any new project is to maintain and improve site circulation with emphasis on pedestrian movement and safety and towards promoting social interaction that relates to the public realm.
- **To Promote Creativity and Innovation:** Waterloo is recognized as an innovative and progressive city. New projects will be encouraged to incorporate creative and innovative design features with emphasis on streetscape character and landmark sites, that contribute to a project or neighbourhood theme. The UDM is intended to promote creative and innovative design solutions, as shown in many projects and institutions across the City.
- **To Encourage Sustainable Design:** Waterloo is recognized as a leader in environmental initiatives. The UDM presents a new approach to promote sustainable design through intensification projects and public realm improvements.

### 1.3 Urban Design Manual Sections/Format

The UDM is organized into five sections summarized below:

- **Part 1, Introduction:** This section introduces the UDM and the primary design objectives for the City. This section also explains what urban design is for Waterloo and how the UDM will be used.
- **Part 2, General City Design Guidelines:** These guidelines implement the City's Urban Design Objectives in the public and private realm, and apply to all development projects throughout the City with emphasis on the Site Plan Review Process.
- **Part 3, Supplemental Guidelines:** This Section establishes detailed design guidelines for specific types of developments or locations in the City. These guidelines are to be read in conjunction with the General City Design Guidelines.
- **Part 4, Site Plan Review Guidelines:** This Section includes process guidelines and technical standards for the City's Site Plan Review Process. The process guidelines identify the Site Plan review and approval steps and include check lists for submission requirements. This Section also includes a series of design standards for site plan drawing details and plan submissions.
- **Part 5, Appendices:** This Section includes supporting background information for the UDM including a glossary of terms, building design options, design criteria, relevant maps and plans (attached in **Appendix D**) and supporting technical information.

### 1.4 Urban Design – What Is It?

**Urban Design** is an evolving discipline focused on the design and analysis of the city including the interrelationship of structural elements (such as the city neighbourhoods, nodes, corridors, open space system) and character elements (such as streetscape design, gateways and landmarks).

Good urban design is about creative city building and the art of creating **great places**—places for people. This involves design that contributes to pedestrian friendly-streets, human-scale dimensions, integrated site development and design that responds and enhances the surrounding context. It also involves promoting innovative and creative design solutions that contributes to a *sense of place* and community identity.

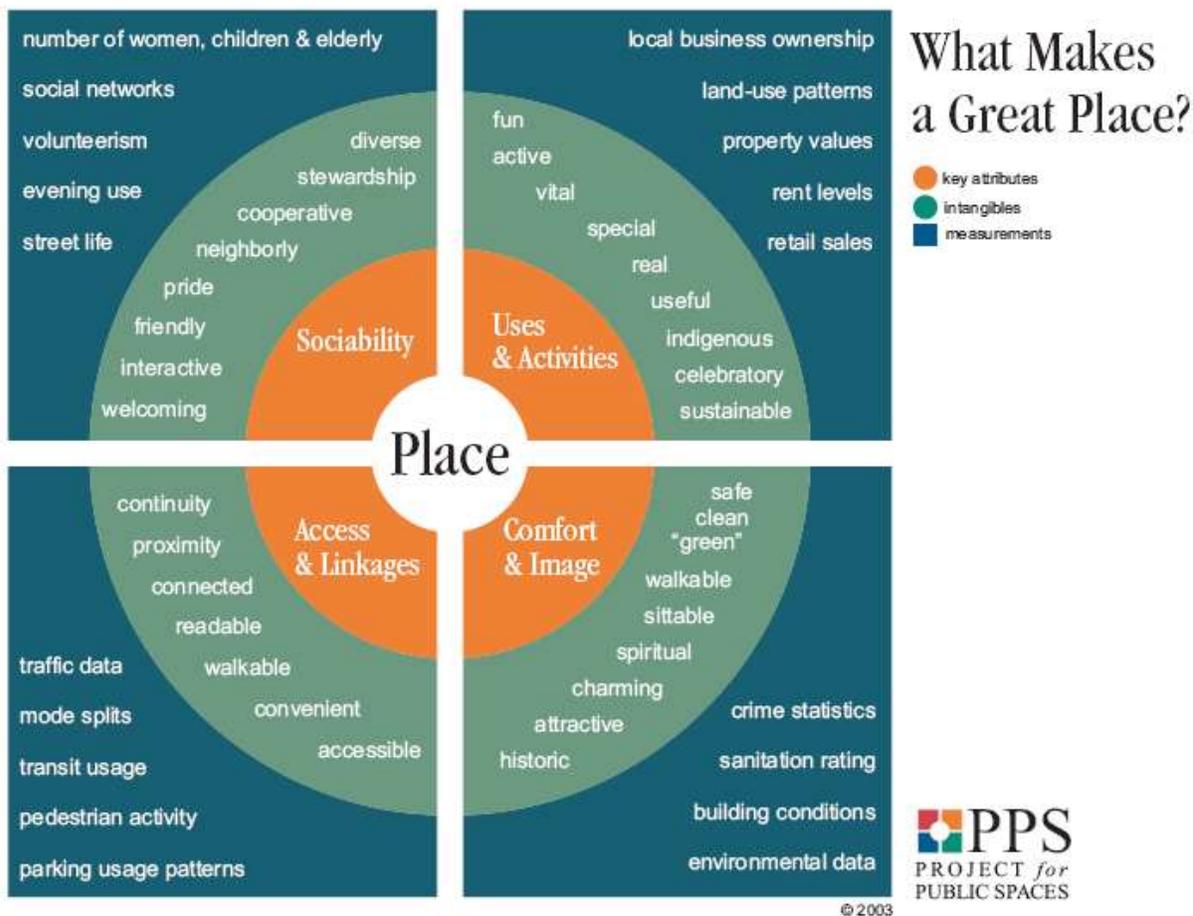


*The CIGI Master Plan with the Balsillie School of International Affairs is based on principles of good urban design*

The design of great places involves more than physical design – it is also about understanding and facilitating social interaction as well as promoting sustainable design solutions that reduces negative environmental impacts through skillful, sensitive design<sup>adapted from McLennan, J. F. (2004), The Philosophy of Sustainable Design</sup>

A list of criteria that contribute to great places is provided below prepared by the Project for Public Spaces (PPS) organization. These criteria should be considered for new development projects and public realm improvements to create interesting, vibrant and dynamic city spaces.

Urban design is an evolving field and requires continuous review and updates to respond to emerging trends, issues, practice and legislation. To address this, the UDM is intended to be a living document, linked to the City’s Official Plan and other relevant initiatives and to best practices. The UDM will be updated on a regular basis to ensure that it provides effective guidelines for the City of Waterloo.



### 1.5 Design Guidelines – An Evolving Practice

Urban Design guidelines are a set of design recommendations intended to guide site development to achieve a desired level of prescribed **quality** in the public and private realm. Since 1982, the City has used design guidelines to guide development in specific locations across the City. A list of city-initiated guidelines is attached in **Appendix B** for reference.

In the past, design guidelines were primarily used as part of the Site Plan Review Process however, they were limited in scope based on the provisions of the Planning Act which limited a municipality’s ability to comment on building design features. In 2006, the Province amended the Planning Act to broaden Site Plan Control to include detailed building design features (“exterior design”). The City has passed the necessary policy amendments (through Official Plan Amendment 72) to expand Site Plan Control with supporting Urban Design Objectives, Policies and Implementation Policies. The role of design guidelines has been strengthened through the Official Plan Amendment and the Urban Design policies provide an effective policy basis for the UDM and design guideline implementation.

The City may encourage Applicants to prepare urban design studies or master plans as described in Part 3 of the UDM to establish a clear vision and supporting guidelines for a development project particularly for Official Plan Amendment and Zone Change Applications. Project guidelines should be prepared in context of the UDM and include detailed guidelines for the development typically with a concept plan. Development guidelines will be formally linked to the development approval recommendations and used as a component for Site Plan review and approval.

## 1.6 Context

The City of Waterloo has a long and prosperous history based on stability and innovation. In the beginning, Waterloo was founded as a village in 1857 and shortly after, became a Town in 1876. About seventy years later, Waterloo was incorporated as a City in 1948. Following this inauguration, Waterloo experienced most of its growth in the last quarter century with significant subdivision development towards the outer urban edges and major academic and hi-tech expansion in the central part of the City. During this growth phase, the City was a responsible steward by adopting progressive environmental and trail policies, promoting neo-traditional design principles for new subdivision development, protecting its Uptown Area as the primary retail and cultural centre, and most recently, adopting a **Nodes and Corridors** land use model (established through the Height and Density Policy Study) to accommodate future intensification.



*The City is expanding towards its outer edge through sensitive suburban development*



*Major high-rise buildings are being developed on the City's major corridors*

The current planning paradigm plans for the City's greatest height and density along its major roads and intersections while promoting stability in the surrounding low-rise neighbourhoods. The City is experiencing significant intensification along its Nodes and Corridors areas resulting in new sets of challenges and opportunities for the City including compatible massing forms and heritage conservation.

The UDM provides a design strategy for intensification and is expected to evolve over time. Illustrative examples of intensification projects are provided in **Appendix C** showing different design solutions at various densities. In addition to new intensification pressures, a summary of relevant initiatives affecting the City and UDM implementation is provided below for reference and for future planning and urban design considerations:

- **Height and Density Policy Study:** In 2002, the City of Waterloo approved a Height and Density Policy Study to plan for intensification across the City primarily in planned Nodes and Corridors conceptually illustrated below. The Height and Density Policy Study provided the basis for new official plan policies, new zoning provisions and to adopt new design guidelines. Design guidelines for the Nodes and Corridors Areas are included in the UDM.
- **City Design Guidelines:** Since 1982, Waterloo has used guidelines to clarify its design expectations for development for select locations in the City. These guidelines will continue to apply however, over time, they will be incorporated into the UDM. The primary design guideline for the City is the UDM.
- **City Strategic Plan:** In 2019, the City of Waterloo 2019-2022 Strategic Plan Report was adopted to chart a course towards a collective desired future in the local context. Building on the strong foundation of the 2008 Strategic Plan, the update incorporates expanded guiding principles that include the principles of equity, inclusion, and sustainability. These guiding principles are intended to inform the implementation of the strategic pillars and objectives of the City. The UDM assists in implementing these strategic objectives of the City by incorporating the principles of equity, inclusion and sustainability into the standards, guidelines and requirements herein.
- **Pedestrian Charter:** In 2008, the City of Waterloo adopted a Pedestrian Charter to advocate walking as a safe, comfortable and convenient mode of urban travel. The UDM supports the Charter mandate and provides effective strategies to improve walkability through new site development and master planning exercises.
- **Official Plan Reviews:** The Official Plan provides the policy basis for the UDM and urban design guideline implementation. The UDM should be updated on an as-needed basis to implement new Official Plan and Urban Design policies.
- **Intelligent Community:** Waterloo is identified as one of the most intelligent communities in the World. This recognition is resulting in more innovative architecture and culturally inspiring spaces. The UDM supports this philosophy.
- **Regional Growth Management Strategy:** On June 25, 2003, the Regional Municipality of Waterloo (the Region) approved a Regional Growth Management Strategy (RGMS) clarifying the Regional growth boundary and promoting a centralized rapid transit route. The City should anticipate future intensification areas and develop area-specific guidelines that promote compatible development and site character.
- **Provincial Legislation:** The Province has released a number of initiatives that promote intensification in planned areas (built up area) that effect local planning decisions such as Provincial Policy Statement, the Places to Grow Growth Strategy and the Greater Golden Horseshoe Growth Plan, and Planning Act reforms. The Province has passed other legislation, such as amendments to the Ontario Heritage Act and the proposed Accessible Built Environment Standard which affect local planning decisions. The UDM identifies many relevant legislation and policies in the design guideline sections (through Guideline Tips or References). The UDM will be updated to reflect current legislation and standards on an as-needed basis.



## 1.7 How To Use The Urban Design Manual

The UDM is intended to be read in its entirety. A brief summary of how to use the UDM is provided below:

- General City Design Guidelines**

  - The General City Design Guidelines apply to many types of development projects in the City and may be further expanded upon with Supplemental Design Guidelines. These are general design guidelines and identify the city’s design priorities for site development. The highest level of flexibility will be used in this Section to achieve the primary design objective.
  
- Supplemental Design Guidelines**

  - The Supplemental Design Guidelines apply to specific types of projects and areas in the City. These guidelines are more specific than the General Design Guidelines.
  
- Site Plan Review Guidelines**

  - These guidelines are provided to facilitate development through the Site Plan process, and include detailed design standards for site plan drawing submissions. These guidelines are technical in nature and should be used either as formal standards or in some cases, a best target.
  
- Guideline Objective(s)**

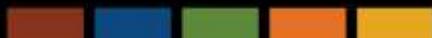
  - Each Guideline section includes a design objective, a clear and simple directive for a specific element of site development. Each design objective is supported by a series of design guidelines that achieve this objective. The City will be open to alternative solutions provided the primary objective is maintained.
  
- Guideline Interpretation / Hierarchy**

  - A hierarchy of guidelines is established through guideline sentence structure. A higher level of direction is provided through more active words such as to “design”, “provide” and “incorporate”. While still important and relevant, a lower level of direction is provided through more softer words such as to “encourage”, “consider” and “emphasize”. Together, all the guidelines are used to achieve a specific design objective through a range of flexible solutions.
  
- Technical / design terms**

  - The UDM includes many design and technical terms. A summary of these terms, some of which are highlighted in *Italics* throughout the UDM, is provided in **Appendix E** for reference. For visual purposes, an illustrated Architectural Glossary is provided in **Appendix F**.
  
- Reference Guidelines / Material**

  - The UDM includes a series of reference material identified as “Guideline Tips” or “References” through the guideline section and information provided in the Appendices. This information is used to facilitate the development review process (as procedural guidelines), identify relevant policies or legislation and to provide supporting examples. The City will update these references through future UDM updates.
  
- Master Planning/ Design Studies**

  - For large or complex development projects, Applicants are encouraged to prepare a supporting urban design study or master plan to clarify the development proposal and design priorities. All design studies should be evaluated in context of the UDM and the City’s Urban Design policies. As part of the development review process, these guidelines should be





referenced in the Report Recommendations and include a recommendation that the development guidelines form a component of Site Plan review and approval.

**Design / Development Review**

- As part of the development review process, City staff will identify key design priorities during the *pre-consultation* meeting and encourage Applicants to review the UDM prior to submitting their development application(s). The key design objectives, and priorities should be identified early in the process rather than in later stages. The design guidelines and criteria may also be used at other stages including the City Planning Report analysis and throughout the Site Plan review process.

**Potential Conflicts**

- In some cases, there may be a potential guideline conflict(s). The UDM has been prepared to avoid most conflicts however, some judgment (common sense) may be required to provide flexible solution that achieves the design intent or objective. Design guidelines are subject to the provisions of the Ontario Planning Act, Zoning by-law and other legislative requirements/technical standards. In cases of potential conflict, the more restrictive/legislative requirement shall prevail.

**Flexibility**

- The UDM provides a balanced approach to site development, and will include a fair level of flexibility provided the primary design objective is maintained, and also, subject to unique site factors such as site grades, surrounding character and safety needs. In cases of potential conflict or impasse, best judgment and common sense will help prioritize a reasonable design solution. Applicants are encouraged to provide supporting rationale to justify alternative solutions.

**UDM Graphics**

- All graphics provided in the UDM are conceptual in nature and intended to illustrate a specific guideline or design objective for illustration purposes.

**Future UDM Updates / Revisions**

- The UDM will be updated on a regular basis however, the General City Design Guidelines and Supplemental Design Guidelines are Council approved guidelines and will require Council approval for future updates and revisions. The technical guideline sections (Site Plan Review Guidelines and Appendix) are more technical in nature and will be subject to staff review and General Manager Approval.

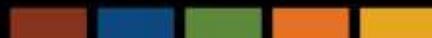
**Existing City Guidelines**

- Overtime, the City will update existing city-design guidelines and incorporate them into the UDM with current guidelines and standards. Until then, existing city-design guidelines will continue to apply in context of the UDM however, in areas of conflict, the UDM will take precedence. The Site Plan Standards will take precedence over existing guidelines.

**Project Guidelines**

As a general principle, project guidelines will take priority over the General City design guidelines. The UDM however, will provide additional direction for areas not covered in the project guidelines.

The Urban Design Manual utilizes a number of acronyms throughout the document. The primary acronyms include:



- The “UDM”: The Urban Design Manual;
- The “SPRC”: The Site Plan Review Committee; and,
- The “SPRG’s”: The Site Plan Review Guidelines (Part 4)

## 1.8 The Urban Design Awards Program

To recognize a high standard of urban design, the City will re-institute its Urban Design Awards with the following awards categories:

- Award of Excellence: projects demonstrating the highest standard of urban design across the City.
- Award of Merit: well designed projects demonstrating a special or unique feature or element that deserve special merit.
- Award of Distinction: recognition for being an Urban Design Award finalist.

The UDA nomination criteria, evaluation criteria and judging committee process is provided in **Appendix L**. The UDM will provide a basis for evaluation.

## 1.9 Consultation

The UDM has evolved from its original inception through the first draft of the Nodes and Corridor guideline project. In 2005, the City retained MMM Group, Walker Nott Dragicevic Associates Limited and Karen Hammond to prepare these guidelines. During the guideline process, the City expanded the project to provide a more comprehensive approach to intensification with greater emphasis on Planning Act reform implementation (Bill 51). The City has worked with the consulting team to prepare this UDM and has circulated the draft UDM to various City Advisory Committees, University of Waterloo representatives, the Grand Valley Association of Architects President and industry stakeholders including the Waterloo Region Home Builders’ Association (liaison committee) and to various other stakeholders. The UDM has been prepared with a broad range of comments, and will continue to evolve through a consultative process

## 1.10 Credits

The UDM has been prepared by the City of Waterloo in consultation with MMM Group. The majority of graphics have been prepared or authored by the City of Waterloo. Additional credits belong to: MMM Group, GSP Group and Mark Zuzinjak, Silver Lake Developments (BarrelYards Development Inc.), KPMB Architects, Centre of International Governance Innovation (CIGI); MacKinnon and Associates, Taavi Siitam, Brian Roth & Associates, Quadrangle Architects, Fram Group., ABA Architects Inc, INC Corp., MHBC Planning, COHOS EVAMY Integradesign, SunVest Realty, IBI Group (PEIL), Context Developments, Robertson Simmons Architects Inc. Teeple Architects, Joe Somfay Architect Inc., Francesco Alaimo Architect Inc., Turner Fleisher Architects Inc., Busy Perkins + Will, Baird Sampson Architects, Urban Strategies, University of Waterloo, Project for Public Spaces (PPS), and Google Earth (for aerial images).