Ottawa's Byward Market is home to some of Ottawa's most enduring heritage. It is the seat of our cultural existence, coming to existence alongside the establishment of Ottawa. It has been home to a public market since 1827. Since the age of the automobile, it has become successfully more overrun with automobiles, to the detriment of a vibrant public culture. Heritage buildings are obscured by parking; public space is devoted to parking; traffic congestion impedes movement of pedestrians and cyclists. Summer months, when the Market is busiest with local foods, cafes and restaurants abound, but the Market becomes increasingly uninhabitable. Locals stay away, to the detriment of businesses. Through this study, we hope to generate a public conversation on the future of the Market, and show how we can Reclaim the Streets, make places for people.

Narrow sidewalks make for awkward public spaces; patios compete for space alongside pedestrians, while garbage cans, signage and street furniture are relegated to being backhanded hurdles. Women may feel unsafe on public streets with poor lighting and narrow walking spaces. Sensors crossing sidewalks from restaurants to patios on the road space collide with pedestrians and reduce the quality of the public experience.

Large intersections wide turning radii create uncertain pedestrian crossings; cars start into intersections but find them blocked by pedestrians unclear when it is safe to cross, further impeding traffic. Barrier free access is often limited.

Pedestrian movement is impeded by unclear safe places to cross, worn paint, poor signage and aggressive drivers, frustrated by traffic. Traffic is plugged by oversized vehicles (buses, delivery trucks) that fail to clear the intersection, resulting in unsafe crossings for pedestrians.

A major focus of the Market is the York Street Stairs, leading from the fountain/plaza at York to Major's Hill Park. The stairs act as an art canvas, focal point, and feature in countless tourist photos; today, they also serve as a backdrop to the OTTAWA sign.

Vehicle access to the Market is challenging: eastbound traffic from Rideau is diverted north onto Sussex and results in conflict as cars jockey in and out of the right-left lanes depending on their desire to turn onto George or not. Turning cars are delayed by pedestrians and force traffic to back up on Sussex, further impacting one of the busiest intersections in the City.

Vehicle signage is required to limit access and movement, but requires constant enforcement to be effective. Narrow sidewalks provide few opportunities for patios, forcing pedestrians into a narrow band of broken, dirty adosments, stream with garbage. Faced with walk next to slicing trucks and parked cars, while streets remain broad and open, though in poor condition.

Public festivals like La Machine, force the closure of streets, and bring hundreds of thousands of people to the spectacle, resulting in restaurants unable to keep up with demand and a new found freedom of movement.

There are few public gathering places when the streets are open to traffic; large places open stress many people to sit, enjoy the weather, experience Ottawa culture.

Pedestrian crossings at major intersections (George/Wallace, George/Byward, Market/Rideau/William/Sussex/York) are timed for the convenience of cars, forcing pedestrians to wait; when intersections become clogged, pedestrians are forced to navigate stationary traffic.

The few pedestrianized spaces are often dense with people, showing that people will gather, sit, walk, enjoy spaces free of cars.

Scale 1:5400
The Market has become a destination space for cars; even when there is plentiful off street parking, in city or privately owned garages, free parking on the street is seen as a panacea to keep businesses thriving. Narrow streets, modest built form, and cultural heritage all speak to a more European style of community, driven to be independent of cars and focussed on a pedestrian and cyclist experience.

One way streets of St. Patrick and Murray create traffic sewers of a bygone age, poorly timed signals and conflicts brought by other traffic gridlock traffic to a halt on a regular basis, while the streets fail to serve as attractive residential or commercial streets.

York Street needlessly transitions from a broad boulevard (east of Dalhousie) to a congested traffic mess, and then back to a boulevard of parking west of Byward Market Square. Through traffic competes with delivery vehicles and tourists searching for parking.

Constant traffic wears down the patience of all visitors, narrow streets, high pedestrian activity, and William Street crowded with parked loading zones and market stalls create conflict and tension.

High traffic interference at Rideau Street, quickly fill with cars blocking intersections and impeding pedestrian safety. Pedestrians then block cars from proceeding, raising tension and causing frustration.

Parked Traffic during peak time.

Vehicular Dependence
Traffic Density

Pedestrianized William Street (George to Rideau) serves as one of the only open public access points between the high density/scale of the Rideau Mall, LRT and BRT and the Market. It is a vital link, and now extends pedestrian access south of Rideau at Ophelia Square, linking tourists to hotels and the Ottawa CityGallery.

The opportunity for continuity of the grand boulevard of York Street is impeded by the prominence given to the stove pipe garage parking located immediately south of the marketings and narrowing the road, forcing York to narrow to a funnel in both directions.

William Street is one of the Market’s most charming blocks, as part of a loop of one way streets around the Market Building, William serves as a loop for tourists looking for parking, the right turn only onto George conflicts with pedestrians continuing on William to the Rideau Centre.
Density is key to successful urbanism in the Market. Other than the large format massing of the Rideau Centre/Westin Hotel/Conference Centre complex, much of the density of the Market is modest; small buildings become smaller the further north from Rideau Street, reflecting a vernacular architecture of modest 2 and 3 storey structures with taller towers along the periphery. Within a 600m radius of the LRT are hundreds of homes, shops and businesses, easily accessible to transit.
Publicly available data mapping shows the density of pedestrian traffic; concentrations of pedestrians in the Market include a steady stream of people from William to George, around the Byward Market building, along York and to the York Street stairs. Steady streams of people near the War Memorial as well as George Street Plaza show a desire for public space.
The Market area is a microcosm of a small town in a big city; within a 600m radius, there is a complete walkable community of retail and commercial uses, offices, residences or various income levels, high density modern apartments and low rise heritage homes sit nestled in a community where plentiful services, public parks and rapid transit abound. By any measure, the Byward Market should be an attractive place to live work and play.
Ottawa is not alone in challenging the idea that once vital public spaces can be returned to a pedestrianized space with the removal of car dominance. Many cities, including ones with similar winter conditions, have done so with great success. Pedestrian-focused areas provide public space that is attractive, functional, comfortable, safe and works better for all.

When you design a city for cars, it fails for everyone, INCLUDING drivers. If you design a multi-modal city, it works better for everyone, INCLUDING drivers.

- Brent Toderian

Ottawa, as a winter city, receives an average snowfall of 76.4 cm, 52 days of snow and an average temperature of -13°C.

Grandville Island, Vancouver, has been transformed from a neglected industrial site to one of Canada’s most visited public markets. It will continue to expand as a response to the success rates and will be done by 2040.

Ogilvie Square, Ottawa. This pedestrian-focused landscape is a complement to a bridge between the newly renovated Arts Court and Ottawa Art Gallery, and the Rideau Street Light Rail Station.

Average snowfall: 32 days
Average precipitation: 130 days
Average winter temperature: -13°C

Study Cases
Pedestrian-Oriented Precedents

Massachusetts, Boston-Faneuil Hall Market, made up of Faneuil Hall, Quincy Market, North Market and South Market. Together, the Faneuil Hall Market make an area filled with pedestrians and major events.

Average snowfall: 15 days
Average precipitation: 137 days
Average winter temperature: -4°C

Third Street Promenade, Santa Monica. Sparse three car-free blocks, has been car free for a while (1960) and continues evolving: restaurants, stores, street performers and much more.

Average snowfall: 11 days
Average precipitation: 127 days
Average winter temperature: -4°C

The Streets, Copenhagen. World oldest and longest pedestrianized street with a total length of 2.1 km.

- 91% Increase in outdoor café seating, from 2,970 seats to 7,020 in 2004.
- 60% Increase in pedestrian space, from 15,800 SQM in 1982 to 99,700 SQM in 2005.
- 35% Increase in pedestrian volumes in the first year after the conversion.
- 40% Increase in stepping and staying activities from 1998 to 1996.
- 20% Increase in citywide pedestrian volumes to 15 million on average.

Average snowfall: 20 days
Average precipitation: 170 days
Average winter temperature: -13°C
Starting as a pilot project, with little capital outlay, Clarence, York and George Streets are converted to woonerfs; all street parking from these streets is removed and signage is provided to direct drivers to underutilized parking garages; primary parking at the Clarence/Dalhousie and Clarence/Parent Garages is monitored. Byward Market Square and William Street (York to George) are converted to pedestrian only streets, leaving a 6m wide fire route.

Truck deliveries and garbage pick up is restricted to limited off-peak hours. Clarence between William and Dalhousie is also pedestrianized, increasing patio and shared public space. A dedicated pilot project for tour bus parking on York (between William and Dalhousie) is provided. The emphasis is on a low capital cost demonstration project to run from April to November, providing reliable data on increased traffic flows, surveys of visitors and residents.

Woonerf: a dutch style street where cars, bikes and pedestrians share the space, with emphasis being on traffic calmed design, and vehicle traffic is restricted to a walking pace.
Building on the success of the pilot project, the design is formalized and advanced with bold initiatives. The Byward Market parking garage, already beyond its lifespan, is demolished along with a complete excavation of York Street to create a multi-storey underground parking garage and a single level bus and delivery bay under York Street. The street is reconstructed with trees, plazas and a reconstructed woonerf.

The below grade spaces provide needed loading docks, storage space for vendors and tour bus parking/loading. Vehicles enter and exit on axis with Parent Avenue with a new signalized intersection. A new city-owned building is constructed at the site of the Byward Parking garage, providing public services (such as washrooms, tourist information) along with new commercial uses (facing Byward Market and William Streets) reinvigorating the ground level on both sides; above grade uses could include housing (market or co-op), offices, a library or theater. A festival plaza is formed at the south side of the building, reconnecting the boulevard width of York Street west and east of the Byward Market.

The York woonerf would be closed completely during specific festivals enhanced public art, landscaping and wayfinding will enhance pedestrian experiences of the Market.
City-led initiatives on creating a more vibrant, attractive and exciting place will spur private development. Some sites are already being developed/redeveloped with tall towers, building on the success of the East Market towers (Cumberland/York) over the last 15 years. Key is that new development must be compatible with the existing built form, respecting the heritage character while reflecting the architecture of contemporary mores. Possible development includes:

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<th>Area (GSM)</th>
<th>Notes</th>
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<td>81 York St</td>
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Assuming 75% efficiency in land use (space lost to setbacks, patios, balconies, unbuildable or inefficient form, still results in over 47,000 sq. m (500,000 sq ft) of built form. Assuming floor area commercial or retail uses, this would result in nearly 12,000 sq m (130,000 sq ft) of new space for businesses, restaurants, food retail or other commercial space. If 20% of the space was used for offices, this would result in 9,450 sq m (100,000 sq ft) of office space accommodating over 700 office jobs. The remaining 25,044 sq m (270,000 sq ft) of space could be developed for 350 residential units across a range of sizes from small starter units, to family sized units, bringing a mix of market and affordable housing units to a walkable, vibrant, community.

350 resident units accounts for over $18 million in development charges and an annual property tax revenue of over $3 million per year; ongoing property tax revenue from office and commercial uses provides additional revenue, over a modest 20 year lifecycle, the capital investment in the Byward Market results stable economic performance and a higher quality of life for residents, neighbouring communities and visitors.
A long range vision is necessary to envision an improved public space for the Byward Market. The resulting movement analysis shows that traffic movement at the perimeter (Sussex, Dalhousie, Murray/St. Patrick) as a “super block” creates a mid-block zone of slow traffic and pedestrian spaces where cycling and walking is prioritized.
This section through the Byward Market building shows how both Byward Market Square and William are congested with cars; minimal space is allowed for pedestrians who are marginalized in the allocation of public space in the right of way. Food sellers and artisans are constrained to narrow strips of land. Curbs are not accessible; pedestrian crossings are limited to congested intersections with little opportunity for the “happy wandering” that is prevalent in a pedestrian friendly community.
By pedestrianizing the same two streets, leaving a 6m wide fire route unencumbered, greater space is allocated for vendors, artists, food trucks, landscaping, or otherwise. Accessible ramps can provide increased accessible space, outdoor seating for relaxation or viewing of street performances and festivals. Space for street trees, lounging and sitting space can accommodate residents and visitors.