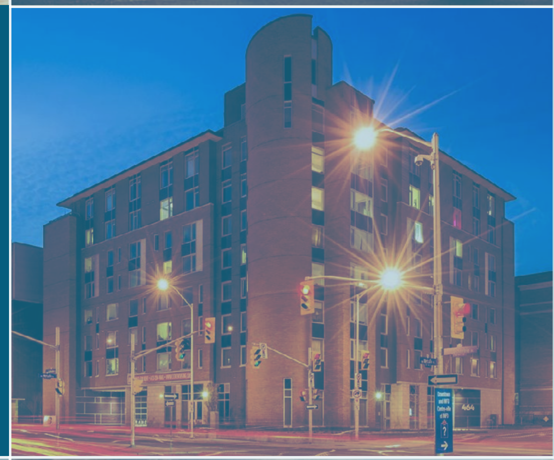
Emergency Services Mixed-Use Concept Study

PHASE 1 REPORT

December 2020

PREPARED FOR:

CREATE TO





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EXECUTIVE SUMMARY

The School of Cities at the University of Toronto was retained by CreateTO (City of Toronto) to produce a two-phase concept study on emergency service facilities in mixed-use buildings. With a focus on Fire and Paramedic Services, this study will support the City's efforts to optimize real estate resources, complementing ongoing initiatives to identify opportunities for partnerships.

The following report summarizes the work carried out in Phase 1, which comprised two main components:

1. An assessment of best practices from twelve case studies of emergency facilities in mixed-use buildings
2. Three round tables with the City's Emergency Service Divisions and the Housing Secretariat that explored the opportunities and challenges of emergency mixed use

Case Studies

Twelve case studies in North American cities were analyzed to understand the diversity, scope, and challenges associated with emergency mixed-use. The criteria for case selection were broad, where cases were considered if they were a multi-use building containing an emergency facility. The work was executed by documenting the partnership agreements, financing and funding tools, timelines, key leadership, land acquisition, and the maintenance and operations of each case (see Appendix A and B for full case study sheets).

Overall, the case studies reveal an abundance of emergency mixed-use projects that continue to be built, though very few were with police services. Cases were diverse in scale, mix of uses and partnership arrangements, where emergency facilities have been incorporated into mid and high-rise residential complexes, tall office skyscrapers, or as part of large master-planned developments.

While fire and paramedic services were compatible with just about every use, partnership opportunities were often used to secure affordable housing. In contrast, few police examples were found and only community policing uses entered creative mixed-use partnerships. In exchange for the provision of the emergency facility and several other benefits, additional density permissions were usually provided to the development partner.

The mixed-use facilities were distributed between private or public land fairly evenly. Diverse arrangements in ownership or long-term leases were often used. However, when built on private land, it was typical that the development partner already owned multiple parcels and developed the entire block cohesively. These cases also usually required lower capital towards the cost of the emergency facility, though other public contributions were still made (i.e. funds towards affordable housing). In cases of facilities built on public land, the maintenance and operations cost of the affordable housing component were usually covered by rental revenue.

Most of the cases were also of high-quality design, with many being LEED certified. However, the design of each building component remained operationally separate; very few spaces were shared between tenants except for some shared spaces with co-located emergency services. The key benefit of partnership lay more in saved operational, construction, and land acquisition costs than in synergies between uses.

Emergency mixed-use are challenging projects to pursue. The lining up of financing was difficult and many cases secured funds with unconventional strategies, including land swaps, the selling of public land beyond the immediate site, internal loan mechanisms of the development partner, fundraising campaigns, and even direct monetary or land donations. Additionally, these projects had long timelines, where the process of developing a partnership agreement and lack of public satisfaction with the benefits attained or project transparency caused delays.

Round Tables

Round tables were held via online conferencing and were attended by leadership from three groups: Toronto Paramedic Services, Toronto Fire Services, and the City's Housing Secretariat. Discussions gauged the level of interest in emergency mixed-use, identified ideal conditions for each respective use, and examined challenges in pursuing these projects.

In summary, attendees embraced the concept of emergency facilities as mixed-use development. Many saw it as an untapped resource and were eager to secure locations downtown as smaller 1-2 bay facilities embedded into a larger mixed-use building. Like the findings in the case studies, very few uses were perceived as incompatible apart from police services.

Similar design-specific conditions were desired by attendees. The ideal design would be accessed off a side road and contain bays where vehicles could pull through without needing to back-in. Additionally, dedicated space for emergency service operations was recognized as a requirement, where shared space among tenants was not sought after despite the mixed-use nature.

While downtown locations were highly desired, there was interest in acquiring sites across the city more generally, particularly in fast-growing areas and for existing facilities in a state of poor repair.

Despite the eagerness for partnerships, a wide range of challenges were highlighted in the round tables, including:

- Difficulty in finding compatible partners and the upfront coordination required for a partnership agreement
- Alignment in multiple aspects of the partnership arrangement:
    - Shared vision for building uses and agreement in how spaces are to operate
    - Alignment of capital and funding required for each building component
    - Location of the site must meet operational criteria of the service providers contained in mixed-use development
- Managing interim operations by securing a temporary site and facility
- Coordination within the City regarding how emergency mixed-use are pursued and streamlining processes
- Limitations in public resources, particularly the availability of land and securing public funds

Preliminary Directions

Preliminary directions were then formed and will be further developed in Phase 2:

- General best practices include pairing fire and paramedic services with affordable housing, despite the high compatibility of these emergency service uses with most other uses.
- The aligning of internal processes is needed to clear confusion in the active roles and responsibilities each municipal stakeholder has in an emergency mixed-use project. This may include initiating working groups to identify potential partnerships, rethinking financing strategies that can use the existing facility resources (i.e. land) to fund projects, creating internal tools and references, and evaluating how existing planning practice can better secure emergency mixed-use.
- Outwards communication towards potential partners on the desire for partnerships to provide 1-2 bay emergency facilities is required to combat the lack of awareness of this type of opportunity to the broader development community.
- Private land should be given consideration on how they may be accessed or leveraged to expand the potential of emergency mixed-use beyond the immediate inventory of facilities. This may include using creative ownership models or financing mechanisms.

- Lastly, if an emergency mixed-use project is initiated, its implementation requires heavy upfront planning with early participation from stakeholders and public transparency. Early decisions made are crucial towards optimizing the project's long-term performance and ensuring smooth processes.

Next Steps

Phase 1 has provided a strong foundation for the second phase of the concept study, outlining high-level best practices, confirming interest from key leadership, identifying potential areas for emergency mixed-use, and exposing key challenges. Phase 2 will focus on the preparation of recommendations on best practices on the implementation of emergency mixed-use within the Toronto context. It comprises the following areas of study:

- An analysis of high development potential and poor state of repair station sites
- The formulation of a financing and funding matrix
- The development of potential delivery model options
- A final report summarizing the work executed and recommendations

1.0 INTRODUCTION

Fire Hall No.5 in Vancouver is a successful example of creative mixed-use containing a fire hall, where this model is starting to be replicated in other existing fire halls across the City.

1.1 Emergency Services as Creative Mixed-Use

Providing new emergency service facilities in Toronto's development landscape is challenging, where the public resources needed to accommodate for rising design standards and growing populations are increasingly scarce. The model of building a single-use facility, particularly in high-growth areas, is no longer a viable option for future development.

However, this isn't a problem unique to Toronto - cities across Canada and the United States face similar challenges. In response, the use of creative mixed-use as a solution is an emerging trend, where new emergency service facilities have been thoughtfully integrated at the base of a mixed-use building.

These creative mixed-use cases are achieved through innovative partnerships with public, private and non-profit groups. They have the ability to reap magnified benefits for each partner, whereby municipalities have been able to optimize public land, provide community amenities, build affordable housing, and take advantage of private financing resources.

While there are many cases of creative mixed-use in Toronto, there are very few containing an emergency service facility. As the list of emergency service facilities in a poor state of repair continues to increase, integrating emergency facilities into creative mixed-use is one solution worth pursuing.

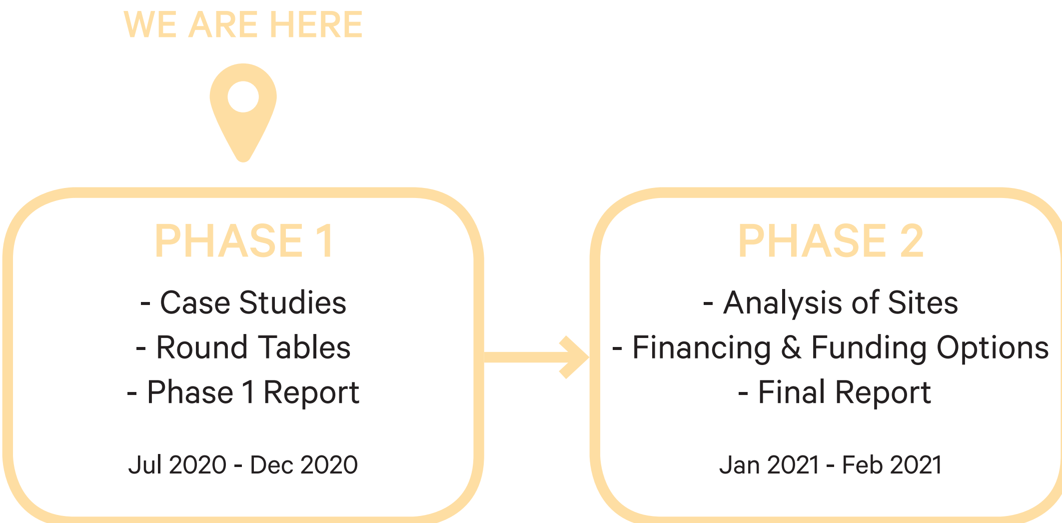


Figure 1. Project Phases

1.2 Concept Study Scope of Work

The Emergency Services Mixed-Use Concept Study was initiated to evaluate the feasibility of integrating emergency facilities into mixed-use buildings in the Toronto context, herein referred to as “emergency mixed-use”. Prepared for CreateTO, it is intended to build the business case for partnerships and support the City of Toronto in managing its real estate portfolio.

The full concept study comprises two phases. The first phase situates the prospect for emergency mixed-use by case study analyses and engaging key divisional operators through a series of round tables. The second phase will focus on the delivery of recommendations on best practices and potential delivery models, including the financing or funding options available for creative mixed-use. It will involve the examination of high potential sites for redevelopment provided by CreateTO.

A Focus on Fire and Paramedic Services

All three Emergency Service Divisions, comprising the Toronto Fire Services, the Toronto Paramedic Services, and the Toronto Police Services, were initially considered for CreateTO’s concept study. However, as work progressed, it was clear that the Toronto Fire Services and the Toronto Paramedic Services are best suited for creative mixed-use, both in divisional interest and suitability as a partner. As a result, this report focuses primarily on Fire and Paramedic Services.

Phase 1 Overview

The following document is the Phase 1 Report of the broader concept study, summarizing the work completed to date. Phase 1 comprised two main components: case studies and round tables with key municipal stakeholders, where the work was executed between the months of July to December 2020. The findings from each component have been recorded and analyzed in this report with preliminary best practices. They will used to inform the second phase of the concept study.

2.0 CASE STUDIES

2.1 Process

The case study analysis provided insight into the best practices and the benefits of emergency services as partners in mixed-use development. These cases also looked at the broader reception of emergency mixed-use buildings in planning practice, including their associated challenges and the conditions in which they emerged.

Twelve case studies of mixed-use buildings containing an emergency service facility were studied in total (See Figure 2). The criteria for selecting the cases were broad, where all cases chosen met the following:

- Contain an emergency service facility (fire, paramedic, or police services) as part of the building;
- Is located in North America;
- Involve a development partnership, including those between municipal divisions and public bodies;
- Contain multiple uses within the same building; and
- Have been built or are currently under construction

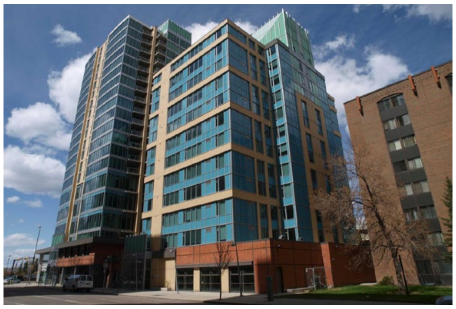
The research undertaken contain a combination of news sites, staff reports, and in-house knowledge. For a list of references used for the case studies, please see Appendix C. The following information was collected for each case:

1. Name of project
2. City of project
3. Date of Completion
4. Size (sq.ft.)
    - of the emergency service facility
    - of the entire mixed-use building if possible
    - of the other uses within the building if possible
5. Project Cost
6. Development Partners
7. Description of the project, including the diverse uses
8. Partnership Model
    - The partnership agreements and benefits exchanged
9. Land
    - How land was acquired, if necessary, and any relevant ownership arrangements
10. Champions
    - Key leadership involved, if applicable
11. Financing and Funding
    - How the project was paid for, the amount, and the parties responsible for providing the financing or funding tools
12. Operations
    - Details on the ongoing operations and maintenance of the project, including any maintenance agreements, efficiencies realized through design, and any revenue generated
13. Other Notes & Lessons Learned
    - Unique challenges or arrangements to the project

The full details of each case study are presented in Appendices A and B ("Fire and Paramedic Case Studies" and "Police Services Case Studies" respectively) and references to external articles are found in Appendix C. The remainder of this chapter presents the key findings, including a comparison of the main agreements achieved in each case, the similarities shared between cases, common agreements found, and general patterns.

Emergency Facilities & Affordable Housing Uses Present

Fire   Paramedic   Police   Affordable Housing



Louise Station, Calgary, AB

Fire hall No.5, Vancouver, BC

West End Square 50, Washington D.C.

One Financial Square, New York NY

Boston Fire Department, Boston, MA

Beaver Barracks, Ottawa, ON

Potomac Yard Station, Alexandria, VA

Mamaweyatitan Centre, Regina, SK

Victoria Fire Hall, Victoria, BC

Rivere Development, Chicago, IL

Varsity Station, Calgary, AB

Coquitlam YMCA, Coquitlam, BC

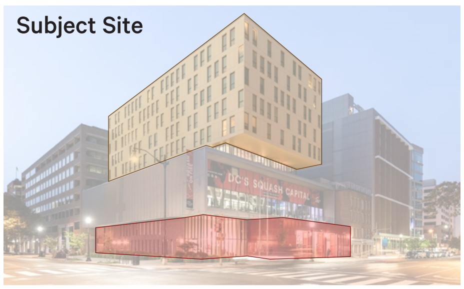
Figure 2. List of Case Studies

2.2 Comparison of Key Agreements

The following table presents a comparison of the key partnership agreements made in each case. The highlighted uses were included if they were a part of the development deal. Additionally, it is important to note that some of the agreements involved multiple parcels, including those within a master planned community or parcels on separate sites.

Project	Gained by City	Gained by Partner
LOUISE STATION Partners: City of Calgary, The LaCaille Group (Private Developer) 	1. Provision of 88 affordable housing units, replacing 72 existing ones in poor condition 2. New fire and ambulance facility at no additional cost to taxpayers 3. Lower maintenance and operational expenses due to: • more efficient building standards • rental revenue covers most operational costs	1. Additional Density • increase from 17 to 18 storeys • Increase of maximum height from 62m to 70m 2. Low Acquisition Cost - the project required the purchase of just the strata for $2.7M 3. Ownership of public land • LaCaille was given the opportunity to buy the site of the former affordable housing tower for $4.5M with demolition costs reimbursed
FIRE HALL NO.5 Partners: City of Vancouver, YWCA Vancouver (Non-profit Developer) 	1. Optimal use of public land 2. Able to leverage YWCA fundraising efforts to help fund the project 3. Responsibility for the maintenance and operations of the affordable housing component given to YWCA	1. Additional density permissions for 31 affordable housing units • Permissions increased to a maximum height of 24.1m and FAR of 2.74 2. No land acquisition - project built on public land 3. Self-sustaining operations; rental revenue is sufficient to cover maintenance and operational costs 4. Fire station as a complementary use for the tenants • 24/7 operations of the fire station provides extra "eyes on the street" for vulnerable tenant group

New Emergency Service Facility | Affordable Housing | Public Amenity | Additional Density Permitted

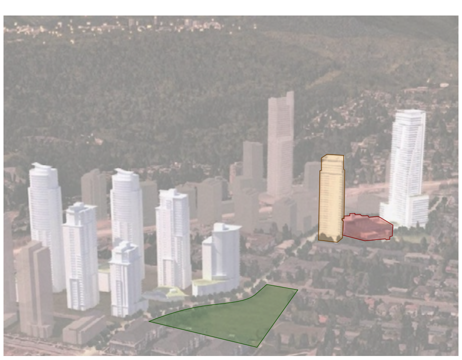
Project	Gained by City	Gained by Partner
WEST END SQUARE 50 Partners: District Government (Washington DC), Eastbanc Inc. (Private Developer)  	1. New public facilities built at lower cost • New library built by Eastbanc Inc; Fire station and ambulance facility covered by city-issued bonds and existing City budget 2. 55 units of affordable housing provided by Eastbanc Inc. 3. Maintenance Fund Contributions - Eastbanc Inc. made a contribution of $4.5M towards the maintenance of the new public facilities	1. Additional density for market housing site • FAR increase from 3.0 to 6.9 • An additional 50ft (15m) in height • Reduced setbacks 2. Ownership of 3 public parcels for $10M less their appraised value (purchased for $20M)
ONE FINANCIAL SQUARE Partners: City of New York, HRO International Ltd. (Private Developer) 	1. New fire station built at no cost to the City • Additionally, the old fire station was demolished at the expense of HRO International Ltd. 2. No land acquisition - new fire station built on private land 3. New public plaza - a new urban public plaza was built on the site of the old fire station 4. Streetscape Improvements - included widened sidewalks and pedestrian arcades 5. Maintenance of the new public spaces (urban plaza, landmark police station) given to HRO under a long-term maintenance agreement	1. Additional density - an extra 244,215 sq.ft. of development was permitted through: • bonus density from public realm improvements • transferred development rights (air rights) from the public landmark site

New Emergency Service Facility | Additional Density Permitted | Affordable Housing | Public Amenity

Project	Gained by City	Gained by Partner
ONE TWENTY FIVE HIGH STREET Partners: City of Boston, Spaulding and Syle Company, the Prospect Company, New England Telephone and Telegraph Company 	1. New fire station at no cost to the City 2. Streetscape Improvements - including exterior arcades, widened sidewalks, and landscaping 3. Preservation of 19th century heritage facades 4. Provision of year-round public space (glass-covered atrium) 5. Leveraging private financing - the necessary funds were solicited in less than 2 months by the development team 6. 150 public parking spaces (below-grade) 7. $7.5M contribution to a municipal social program 8. $4.2M increase in yearly real estate taxes	1. Additional density - an additional 349,320 sq.ft. was permitted through: • FAR increase from 10 to 12.64 and 15.50 for two of the buildings • Reduced setbacks by 25ft 2. Ownership of public land • The public parcel within the block was acquired for $3M
BEAVER BARRACKS Partners: City of Ottawa, Centretown Citizens Ottawa Corporation (CCOC - Non-profit developer)  	1. New paramedic post built at low cost ($100K) 2. Leveraging CCOC financing mechanisms (CCOC was able to secure around half of required funds through debenture agreements and other creative loan arrangements) 3. 254 affordable housing units with CCOC taking on maintenance and operations responsibilities	1. No land acquisition needed - the publicly-owned site was sold to CCOC for $1 (appraised value of $5.3M) 2. Self-sustaining operations - rental revenue was sufficient to cover most operational costs

Project	Gained by City	Gained by Partner
POTOMAC YARD STATION Partners: City of Alexandria, Pulte Homes and Centex Homes 	1. New fire station built at low cost to the City • Developer donated $6.6M for construction of the new station • The City provided an additional $1M to add ambulance bays 2. Ownership of private land • Pulte and Centex also donated the land parcel to the City 3. 64 affordable housing units - $7.75M contribution from developer 4. Self-sustaining operations - rental revenue covers operational costs	1. Nothing other than timely approvals and less delay for the overall master-planned development
VARSITY MULTI-SERVICE REDEVELOPMENT Partners: City of Calgary, Calgary Housing Company 	1. Optimized use of public land • Was a project that combined multiple needed public facilities without any non-municipal partners	
VARSITY MULTI-SERVICE REDEVELOPMENT Partners: City of Victoria, Dalmatian Developments (Private Developer)  	1. Deal to save the City around $12M • Guaranteed price of $35.9M for the new fire station and ambulance facility meant no tax impacts or contributions from senior government needed 2. No land acquisition • Built on private property; agreement transferred the floors with the new facility to the City through strata 3. Provision of 130 affordable housing units	1. Additional density • 3 additional storeys were granted for the affordable housing units overtop the new Fire Hall • The remaining mixed-use buildings to have an additional 6-11 storeys

New Emergency Service Facility | Additional Density Permitted | Affordable Housing | Public Park

Project	Gained by City	Gained by Partner
RIVERE DEVELOPMENT Partners: City of Chicago, Friedman Properties Inc. 	1. New fire and ambulance facility worth $20M 2. Demolition costs for existing fire station 3. To save around $15M in taxpayer money	1. Additional density - an additional 316,359 sq.ft. of development was permitted through: • FAR increase from 7.5 to 11.5 • Increase of maximum height to 455' (139m) 2. Ownership of public land • The 14,600 sq.ft. fire station site and an adjacent 3,150sq.ft. alleyway was sold to Friedman Properties Inc. for $5M
MAMAWEYATITAN CENTRE Partners: Regina Public Schools, City of Regina, Regina Public Library 	1. Optimized municipal resources to provide much-needed community services and a high school • Community police station leased within centre • Split maintenance and operations arrangements between three partners	
COQUITLAM YMCA Partners: City of Coquitlam, YMCA of Greater Vancouver (Non-profit), Concert Properties (Private Developer) 	1. New community centre with significant cost-savings • City's $38.3M contribution mostly covered under developer fees 2. Permanent home to community police station (previously leased) 3. YMCA responsible for maintenance 4. 900 rental and 100 affordable units 5. 4 acres of new and enhanced parks 6. Significant cost-savings • Full development to provide over $100M in community amenities with a City contribution of $57M • Will save the City $250M over its full life-cycle	1. Additional density • Includes 8 mixed-use towers (24-50 storeys) that will house approximately 7000 residents • Permitted FAR of 6.3 for the YMCA site and 5.5 for the second site

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2.3 Similarities Among Cases

Criteria for emergency mixed-use projects

Emergency mixed-use projects usually started with the need to address the poor condition of an existing facility or the need for a new facility to service a high-growth area. The following are key criteria were often present in the partnerships formed:

Location and site criteria

- Sites meeting the specific location and accessibility criteria required for emergency service operations (typically accessed off a side street)
- Sites in high growth neighbourhoods / areas
- Sites in proximity to transit, public amenities and community services

Compatibility of uses

- Uses are complementary and did not infringe on the operations of each tenant

Financing of each component

- Creative financing methods were often employed, including direct land and monetary donations, internal loan mechanisms, or securing funds from charities or religious organizations
- Funding availability from existing programs (usually for affordable housing), city budgets, short and long-term government bonds, and the sale of municipal land

Emergency Service Preferences

Cases of emergency mixed-use with fire or paramedic services far outnumbered those with police services. The cases showed that different emergency service providers shared the same partnership preferences:

Fire and Paramedic Services

- Often co-located with some shared facilities
- Compatible with many uses, including police services, other city departments, residential, office, and retail
- Often partnered with a private or non-profit developer to deliver project

Police Services

- Significantly less cases of partnerships
- Compatible with community or recreational services and other municipal services
- Mixed-use projects supported community policing operations only

The small number of available police cases suggest that only certain police operations are appropriate for mixed-use development. In particular, only community policing operations were found in the cases of the Coquitlam YMCA and Mamaweyatitan Centre. These operations focus on collaboration with community groups to build trust and prevent crime through public outreach, with facilities that differ from a typical police station.

Long project timelines

The average project timeline to implement emergency mixed-use projects was long, taking around 5 years for the initial planning and up to 10-14 years for the full build-out.

Delays had costly consequences due to inflating construction expenses, resulting in the loss of planned programs, (i.e. the loss of a health clinic and food store in the Mamaweyatitan Centre), or direct monetary loss in public dollars. Some reasons for the long timeline were:

Long upfront planning process

- More time was needed to find the right partners and to hold discussions and negotiations when a partnership was introduced later in the process. In some cases, such as the Victoria Fire Hall and Louise Station, an innovative proposal brought forward by the private sector initiated the project, despite years of needing a new facility.

Poor public sentiment

- Examples like Square 50 and Louise Station showed how poor public sentiment stalled projects for years. The source of public discontent often came from publicly issued sole-sourced contracts, the amount of public benefits secured, and the development density.

High-quality designed buildings with components operating separately

Most of the emergency mixed-use projects studied were of high-quality design and typically LEED certified. Integrative processes, design charettes and early consultation were often executed for value engineering and to optimize the use of public assets. Additionally, efficient building systems were often built because of their significant long-term cost-savings despite higher capital costs.

Additional design measures were often used to address the concern of siren noise. While emergency services already had operational policies to ensure sirens were only sounded on the public-right-of-way, additional sound-proofing measures were usually built into the project. These included double-ceiling systems for the fire station, floating slab system, sound-proof windows, and fiber-cement boards among other material and design interventions

Regardless of the uniformity on the exterior facade, emergency mixed-use buildings were typically designed to have their uses operate independently from one another. Many did not share common space between each component and had separate entrances, other than some shared spaces in co-located facilities. However, the segregation of uses was viewed as positive for the service operations and privacy of tenants.

2.4 Common Partnership Agreements

New Emergency Service Facility

Not all cases envisioned the new emergency service facility from the onset, (i.e. One Financial Square, Potomac Yards), but all cases eventually resulted in a new emergency service facility.

Seen in:

- All cases

Affordable Housing Provision

Affordable housing was provided in many partnerships with Fire and Paramedic Services. These projects usually benefitted from better public reception and often had multiple sources for funding specifically for affordable housing.

Seen in:

- Louise Station
- Fire hall No.5
- West End Square 50
- Beaver Barracks
- Victoria Fire Hall
- Varsity Multi-Use
- Potomac Yard Station
- Coquitlam YMCA

Increased Density Allowance

Permissions to build additional density was always included in an agreement with a private development partner. It was achieved through various forms, including increased lot coverage, additional floors, transfer of air rights, and increased floor area ratio.

Seen in:

- Louise Station
- West End Square 50
- 125 High Street
- Victoria Fire Hall
- One Financial Square
- Rivere Development
- Coquitlam YMCA
- Fire Hall No.5

Ownership of Public Land

The opportunity to own public land was often included in the agreements. The way in which land was transferred varied, including the sale of the subject site, sale of another location, or sale of a right-of-way. Sale proceeds were then often channeled back into funding the project.

Seen in:

- Louise Station
- Rivere Development
- Beaver Barracks
- West End Square 50
- 125 High Street

Land Swap

Land swaps provided the benefit of consolidating parcels into a larger site for increased flexibility.

Seen in:

- Coquitlam YMCA

Co-ownership

Co-ownership provided flexibility in the allocation of partner responsibilities and increased the total net shared assets.

Seen in:

- Coquitlam YMCA

Strata Titles / Ownership

These agreements consisted of the City gaining ownership of the floors housing the emergency facility or the developer gaining the air rights above the emergency facility. Strata arrangement provided flexibility in land acquisition and in the financing of each building component.

Seen in:

- Louise Station
- Rivere Development
- Victoria Fire Hall
- 125 High Street

Figure 3. Common Partnership Agreements in Case Studies

Long-term Leases

Long-term leases allowed the emergency service provider to operate the new facility at a low cost, and were often provided at 25, 50, and 99-year terms. They provided the flexibility of operating a new emergency facility outside public land.

Seen in:

- One Financial Square
- Beaver Barracks
- Victoria Fire Hall
- 125 High Street

Public Realm Improvements

Public realm improvements, including new parks, pathways, and streetscape improvements, were often secured as additional public benefits. In some cases, the partner also took maintenance responsibilities for the new public amenities.

Seen in:

- One Financial Square
- Coquitlam YMCA
- 125 High Street
- Mamaweyatitan Centre
- Victoria Fire Hall

Payments to Public Programs

Negotiations sometimes included contributions towards municipal programs (i.e. social programs)

Seen in:

- 125 High Street
- Rivere Development

Emergency service mixed-use developments generally comprised a combination of the arrangements shown in Figure 3. While the list is not exhaustive, it reveals the diversity of agreements reached between partners. The agreements provided significant cost-savings advantages, where the typical set-up comprised:

- Shifting design/construction responsibilities to the developer and taking advantage of the larger scale of the overall project
- Leveraging funding available for the various components of the building (i.e. affordable housing) and the partner's financial resources (fundraising expertise, existing equity, etc)
- Building energy-efficient systems for long-term cost savings in addition to environmental benefits
- Delegating maintenance/operations responsibilities to partners through maintenance agreements and ownership arrangements
- Using affordable housing rental revenue to cover operational expenses on sites with no mortgage. Operational costs were sometimes supplemented by miscellaneous retail and parking revenue streams

Undoubtedly, the two most common arrangements were the provision of affordable housing and additional density permissions for the developer. In most cases, increased density was achieved through floor area ratio (FAR), height, and reduced setback requirements.

Many cases did not have a reduction of parking requirements, particularly as the allowable density was often increased. However, most facilities had minimal parking; in the cases of Fire Hall No.5 and Square 50, only one underground level with 15 and 24 spots respectively were needed to service all building tenants. Similarly, in larger developments like Beaver Barracks, which had no parking requirements, all parking was allocated underneath the central garden and was available to less than 40% of units.

The list also shows a wide variety of ownership arrangements, including the selling of public land, the use of strata titles, and long-term leases. No strong preference for a specific ownership structure was found.

2.5 General patterns

	Louise Station	Fire Hall No.5	West End Square 50	One Financial Square
Land Ownership	City	City	City	Developer
Ownership Type	Strata - developer owns condo portion	Owned by City	Strata - developer owns market tower	Owned by Developer, under long-term lease with City
City Contribution to Emergency Facility	$12.6M	$13.1M	$16.5M	None
Size of Facility (sq.ft.)	13,866	13,000	19,085	13,439
Land Acquisition Cost for City (if applicable)	$1.1M	None	None	None
Other Building Uses	Retail, Office, Affordable Housing	Affordable Housing	Affordable Housing, Retail, Office	Retail, Office
Financial Offset (if found)				Demolition costs of existing station covered by private partner
Maintenance & Operations Benefits	Rental revenue covers operational costs	Rental revenue covers operational costs	Private partner contributions of $4.5M to Maintenance Fund, private management of affordable housing	Private partner responsible for maintenance of public spaces and streets

Figure 4. Comparison of Ownership Arrangements and Financial Contributions for Fire and Paramedic Mixed-Use Cases

Ownership Structures

The cases had no strong evidence to suggest a preferred ownership structure, whereby strata titles, long-term leases, or full public-ownership were frequently used (see Figure 4). Additionally, they were split fairly evenly on privately or publicly owned land. However, in cases built on private land, the development partner typically already had ownership over most of the immediate block, with 1-2 parcels left to be acquired. This can be seen in the cases of Victoria Fire Hall, One Financial Square, 125 High Street, and the Rivere Development.

Land Contribution by City

While the land ownership between cases differed, most cases were able to work within limited capital, whereby no land acquisition was typically needed. As a result, most of the public contributions were able to be allocated towards the emergency facility. The only exception among the fire/paramedic mixed-use cases was Louise Station, where a small parcel was expropriated. Creative ownership and operations arrangements made this possible, whereby facilities operated on private land through long-term leases or strata.

125 High Street	Beaver Barracks	Potomac Yard Station	Victoria Fire Hall	Rivere Development
Developer	Developer (land donated by City)	City (land donated by developer)	Developer	Developer
Owned by Developer, under long-term lease with City	Owned by Developer, under long-term lease with City	Owned by City	Strata - City owns emergency facility, Province in long-term lease with City	Strata - City owns emergency facility
None	$100K	$1M	$35.9M	None
27,000	9,000	22,000	41,700	29,644
None	None	None	None	None
Retail, Office	Affordable Housing	Affordable Housing, Retail	Affordable Housing, Office	Retail, Office
$4M in construction costs saved		$6.6M in donations provided by private partner	$12M in saved costs	$15M in saved costs, demolition costs of existing station covered by partner
	Rental revenue covers operational costs	Rental revenue covers operational costs		

Facility Characteristics

The size of the emergency service facility varied largely, but most were typically two storeys in height. Additionally, the common configuration consisted of a larger fire station containing a few ambulance bays. As noted, fire and paramedic mixed-use projects were frequently paired with affordable housing, although retail and office uses were also commonly placed overhead.

Emergency Facility Contribution by City

Interestingly, facilities built on private-owned land required significantly lower to no public funds towards the emergency facility, though municipalities made contributions in other ways. These cases comprised mostly large skyscraper or office tower developments where most of the block was redeveloped by the private landowner (One Financial Square, 125 High Street, Rivere Development).

Maintenance and Operations

Pairing affordable housing with the new fire/paramedic facility often came with operational benefits. The affordable housing provider was usually not responsible for land acquisition. As a result, rental revenue was sufficient to cover most of the maintenance and operational expenses for the housing component. It was typically combined with other miscellaneous revenue sources (i.e. parking, commercial, subsidies).

Additionally, Maintenance Agreements presented opportunities to delegate maintenance responsibilities to the partner, particularly for new improved public spaces such as streetscapes (One Financial Square, 125 High Street, Beaver Barracks).

However, it was not clear if the revenue generated on site was able to adequately cover operational costs of the emergency service facility.

3.0 ROUND TABLES

3.1 Structure of Event

Three virtual round tables were hosted to engage key stakeholder groups on emergency mixed-use opportunities in the City of Toronto, where attendees provided insight as divisional leaders. Though initially limited to the Toronto Fire Services and the Toronto Paramedic Services, the invitation was extended to the Housing Secretariat as the case studies revealed that affordable housing is a complementary pairing with emergency service facilities.

Each session began with a short presentation by the School of Cities, comprising an introduction of the concept of emergency mixed-use, followed by several case study examples catered towards the division, and a discussion engaging the attendees.

The discussion portion focused on gauging the level of interest on emergency mixed-use from key leadership and inquired about existing challenges. The questions included:

- What is your impression of pairing emergency services into a mixed-use project?
- What are your criteria for compatible site partners?
- Are there any partners or uses you feel are more compatible? Less compatible?
- As key operators, what are your space needs within the stations and/or sites?
- Are there design elements that are critical to your operations?
- Would proximity to certain amenities or other service providers improve your services or efficiency?
- How is the budget managed to providing your services?
- Where are the target areas in Toronto for emergency services / affordable housing?
- How has COVID-19 affected the provision of affordable housing / emergency services? What are some lasting impacts?

Overall, the idea of emergency mixed-use was well-received in the round tables, where all three groups saw this as an untapped resource with the potential to fill existing gaps and needs. The remainder of this section summarizes the key findings from the round tables, which centered around the four key themes of:

1. Compatible uses;
2. Design and Site Configuration;
3. Desirable Locations; and
4. Challenges

3.2 Compatible Uses

Figure 5. Round table attendees reception of a wide variety of uses and desire for segregated uses are reflected in the case studies, including the example of Square 50 in Washington D.C. (Image courtesy of TEN Arquitectos).

High Compatibility with Many Uses

Attendees of the round tables supported the co-location of emergency services and generally saw little conflict in pairing Fire or Paramedic Services with housing, retail or office uses. In fact, closer proximity to shelters and long-term care clients was of interest to the Paramedic Services division, where work with CreateTO to co-locate with long-term care homes is already currently being examined. It was also noted that many co-located facilities currently operate in Toronto, with 25 partially shared stations and 34 fully co-shared facilities.

Similar sentiments were expressed from the Housing Secretariat, who saw housing as compatible with most uses. Consideration for various types of housing was brought up as an additional layer in which to assess compatibility. In specific, mixed-income housing was desirable while housing for more vulnerable population groups, such as supportive housing, may not be suitable for emergency mixed-use projects.

Police services was the only non-compatible use perceived by multiple round table attendees, particularly for housing. While co-located facilities with police services exist in the City, the Paramedic Services round table noted that these spaces sometimes had functional issues, such as security. Overall, the openness to partner with diverse uses and wariness of police services compatibility is consistent with the case study findings.

Compatibility ≠ Shared Space Among Tenants

Despite the enthusiasm for co-location amongst the emergency divisions and support for pairing a variety of uses, there was a consensus that uses should remain operationally separate. The key concerns for this were privacy, security and clashes in work culture for co-shared facilities, which presently exist in some facilities.

All three attendee groups shared the understanding that a mixed-use project would likely not offer programmatic benefits; tenants would not receive preferential treatment from the emergency divisions nor would communal spaces necessarily be present. Rather, the benefits are in shared project costs and the land opportunity, which improves service delivery and provides affordable housing in a manner that achieves broader planning growth objectives.

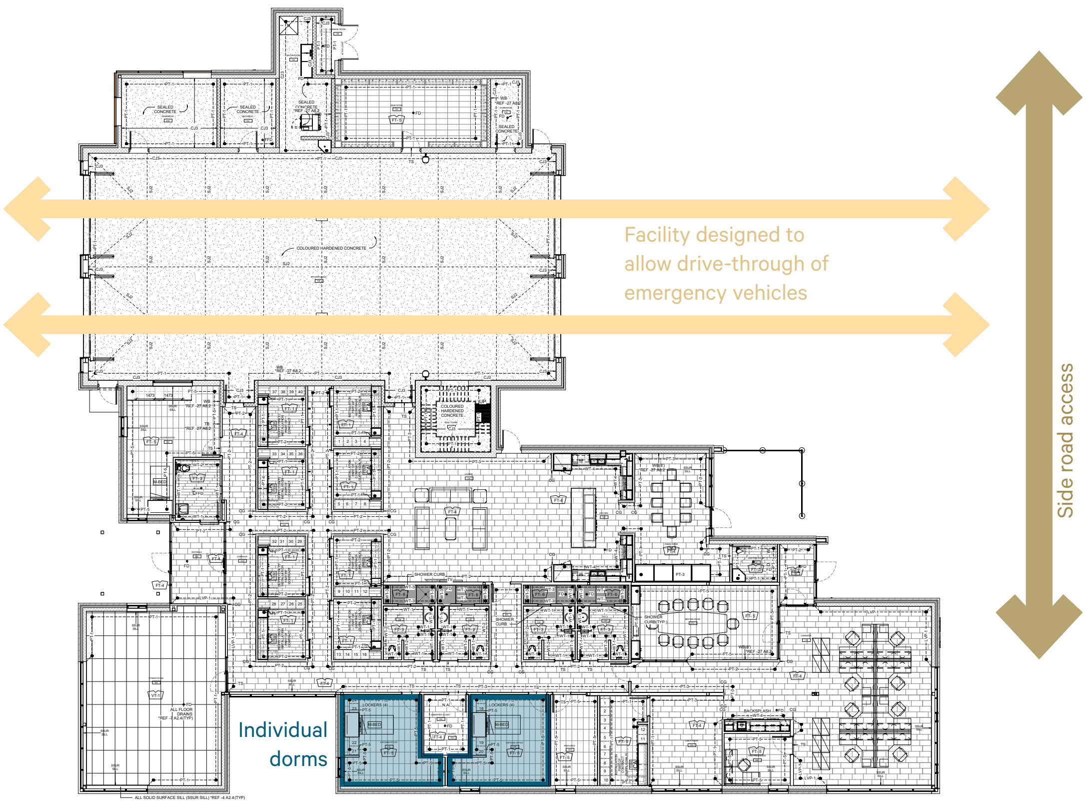

Figure 6. Many of the desired design elements for emergency service facilities are captured in the new Downsview Station. (Base Image Courtesy of Thomas Brown Architects).

3.3 Design and Site Configuration

Accessibility

Designing the emergency facility for optimal service delivery and efficiency was a priority for all groups. Both emergency divisions shared similar site configuration preferences, favouring locations adjacent to a side street or non-major arterial road as a primary means of access. This is also consistent with many of the case studies, where the entrance to the emergency service component was accessed from side roads.

Additionally, both emergency service divisions emphasized a strong preference for the facility to be located on the ground floor with a design that allows emergency vehicles to drive-through. It was noted that facilities that required backing-in from emergency vehicles significantly increased response times and caused the majority of accidents. Although undesirable, it was noted that a significant portion of Toronto's emergency services facilities require vehicles to back-in.

Accessibility may also limit potential uses. Attendees noted that certain commercial uses may be not compatible if they require egress, loading, and parking that conflict with emergency vehicle pathways.

Mitigating noise

Interestingly, siren noise disturbance was not perceived as a major barrier. It was understood that a mix of protocol and design interventions was adequate to mitigate siren noise, ensuring tenants are subject to the same level of sound as their neighbours.

Impacts of COVID-19

Attendees revealed that accommodating for COVID-19 has created additional challenges in the form of increased space requirements, sanitation, and screening protocols. Insight on the design measures that can mitigate the challenges was also shared, many of which are already considered best practices in station design and have been integrated into some current stations. They include:

- Designing spaces for fast cleaning
- The inclusion of a screening/threshold area at main doorways for staff to minimize potential exposure
- Sleeping quarters of Fire Halls to have individual rooms rather than dorm rooms (has been incorporated into the new Downsview Station)
- Washrooms to incorporate individual stalls,

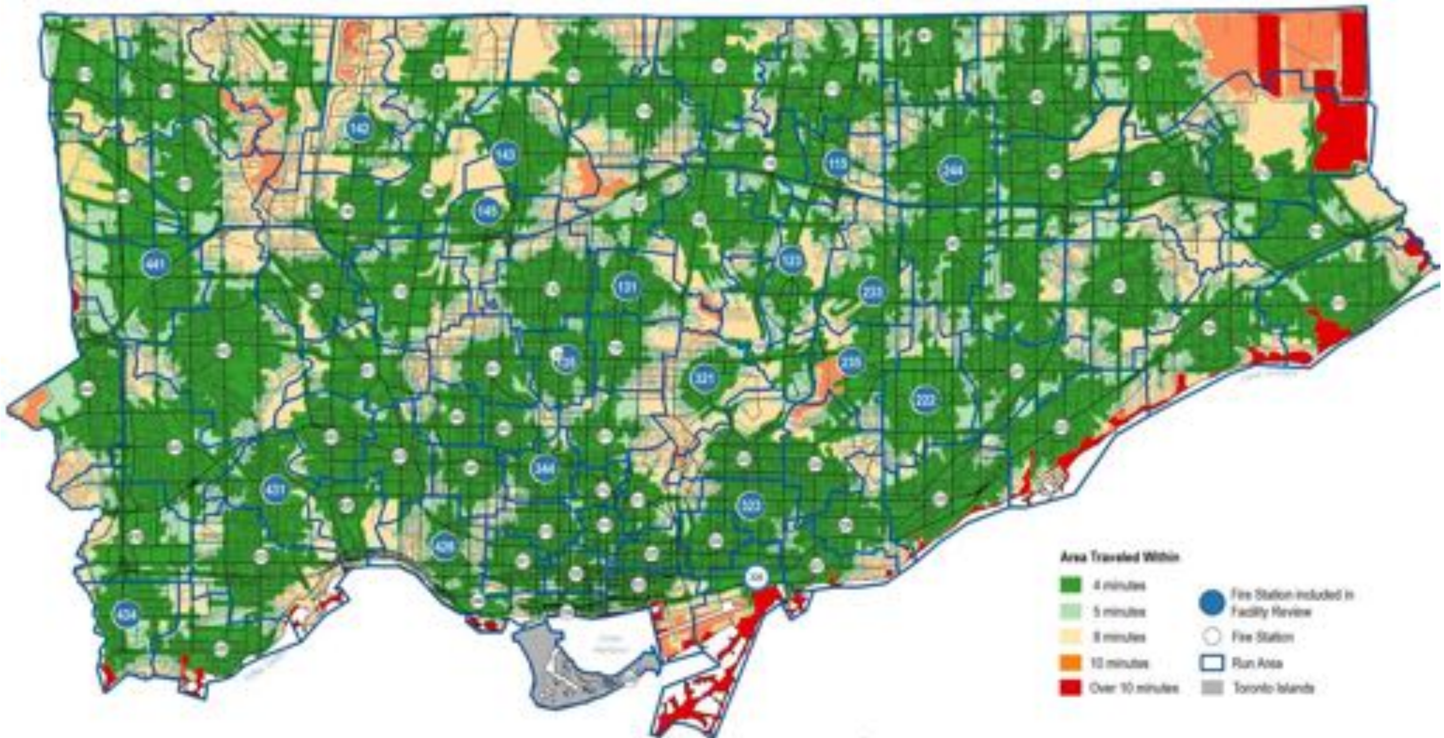

Figure 7. A time travel map produced by Darkhorse Analytics that helps analyze service delivery.

particularly for fire facilities that traditionally only had male washrooms, as both a gender-friendly and COVID-19 best practice

3.4 Desirable Locations

General Areas of Interest

Both emergency divisions were highly interested in securing downtown locations where smaller facilities could potentially be embedded within tall mixed-use buildings. The desired objective was to promote quicker response times and provide flexibility, which is also reflected in recent changes to service delivery, including the Paramedic Services' new hybrid service delivery model and key priorities in Fire Transformation plan to investigate partnerships for alternative fire station models.

To date, Paramedic Services' transition to a "hub-and-post" model has proceeded with one multi-functional hub at 1300 Wilson Avenue and two additional hubs in progress. As a result, the division is primarily interested in acquiring post locations to strengthen the new service delivery model. While northern parts of the city and downtown have been cited as primary areas of interest, the Paramedic Services division is open to securing other locations across the city.

Similarly, attendees at the Fire Services Round Table expressed interest in securing locations downtown but were also open to broader opportunities in the City. Several areas were identified as high-interest locations to secure new fire facilities, including Don Valley (Wards 16 and 25), Flemingdon Park, and the future Christie Property. Building on the Christie redevelopment project, attendees noted that emergency services should be considered with any high-density developments proposed, as the scale of growth could potentially cause gaps in response times.

Strategic Locations for Meeting Response Times

While each emergency service division was eager to secure new locations, it was stated that any new facility must be able to perform within divisional response times. This performance measure is defined as the maximum time it takes for emergency services to arrive on site from the moment a call is made, which is 8'59" and 6'24" for Paramedic and Fire Services respectively. It was also noted that good facility design contributes to faster response times (see Section 3.3).

Round table participants also identified Darkhorse and Qlik Analytics as the data-based modeling tools that would be used to evaluate any proposed location for fire and paramedic services respectively (see Figure 7).

These tools currently guides both emergency service divisions and can be used to assess the impact of new facilities on the overall performance of service delivery.

Identification of High-Potential Sites

Each emergency service division has already identified existing facilities ready for redevelopment, comprising approximately 13 fire stations and a handful of paramedic stations. Most of these facilities are at the end of their building life cycle and have been assessed as not economically worth maintaining.

It was also flagged that potential sites for development are not necessarily those in poor condition. The example of 260 Adelaide Street was brought up as a fire station project in a prime downtown location that naturally attracted development opportunities.

3.5 Challenges

Despite the eagerness for partnerships, round table participants highlighted a wide range of challenges facing the implementation of emergency mixed-use.

Securing partners

The idea of emergency mixed-use was embraced by both emergency service divisions. However, both found the process of securing partners as challenging. While attendees were comfortable pairing their own facility use with many others, they acknowledged their enthusiasm may not be reciprocated by potential partners due to the nature of the operations (siren noise, 24/7 work, etc). However, it was noted that many city services and departments were open to partnering with fire and paramedic services at SMPC meetings.

Similarly, while the Housing Secretariat representatives were enthusiastic about pairing housing with emergency service facilities, they perceived the upfront coordination as a barrier. Coordination efforts would require early communication on potential sites, the scale of anticipated development, and the degree of urgency for the sites. A working session between the Housing Secretariat and Emergency Divisions was suggested as a strategy to start a potential partnership.

Alignment between partners

A shared vision between project partners was identified as critical to the success of emergency mixed-use. Achieving this becomes more difficult as more partners and stakeholders become involved. It requires the alignment of multiple aspects of the project, each one as a potential deal-breaker if not properly addressed, including:

1. **Programmatic Alignment**: the clear identification of building uses, space arrangements (including access and the degree of separation), and the extent of green building features and net-zero mandate.
2. **Alignment of Capital & Funding:** the financing for all components of the project must line up in the same timeline or the misalignment of capital may become a barrier. Additional challenges include competing priorities for funding, whereby facilities that are not necessarily in a poor state of repair are considered better contenders for development, such as the station at 260 Adelaide Street. While the site did not require immediate renovation, it was pursued as a prime redevelopment opportunity with dedicated funds.
3. **Alignment on Delivery Method:** It was noted that the traditional design-build approach to deliver emergency service facilities is not commonly used to deliver affordable housing. On emergency mixed-use sites where affordable housing is desired, strategizing a delivery approach will require upfront coordination led by expertise outside the City.
4. **Location criteria alignment:** the location of the subject site needs to meet the criteria required for emergency service delivery (based on Darkhorse and Qlik Analytics) and still appeal to potential partners (i.e. affordable housing is ideally located close to transit, amenities, etc).

Interim Operations

Implementing an interim facility to ensure ongoing operations is also often required with emergency mixed-use projects. It involves securing a nearby site that meets the location criteria for service delivery, which may prove challenging in parts of the City where land is scarce. The construction and take-down of the temporary facility will also have to be carefully arranged into the overall project timeline.

Accommodating for Heritage

Many fire stations were recognized at the round table as historical buildings well over 100 years old. While beautiful and holding significant architectural merit, they are often difficult to renovate and to sell. The example of Fire Station 227 in the Beaches neighbourhood was referenced, which required $1.6M for the clock tower rehabilitation.

Coordination within the City

Collaboration between city stakeholders is anticipated to be a challenge for emergency mixed-use, where round table attendees spoke to the importance of CreateTO as the prime coordinator. Additionally, emergency division leaders voiced concerns on their lack of understanding on how emergency mixed-use projects would be initiated and by whom. Likewise, attendees at the Housing Secretariat round table were under the assumption that emergency mixed-use are activated by emergency need first, but recognized that housing should be involved in early discussion.

The process in which city resources are distributed was also perceived as a challenge. While a list of facilities with the highest resale value has been identified by CreateTO, the selling of public land as a funding or partnership strategy for emergency mixed-use is not straightforward. Public land can only be sold after it was deemed not useful for another division at the City. Additionally, sale proceeds would enter a city coffer rather than back to the division. Redirecting emergency division funds or other resources back into a potential project was a supported as a potential strategy to move forward with emergency mixed-use.

Limitations in Public Resources

Limitations in public resources, namely the availability of public funds and land, were recognized as firm constraints and a challenge to overcome in the implementation of emergency mixed-use.

Round table participants expressed the struggle of securing funds for current projects. Both divisions plan around a 10-year budget. While Fire Services depend solely on the municipal tax base, Paramedic Services secure additional contributions from the Province. However, the fluctuation of Provincial funds year-by-year creates challenges in planning for short and long-term budgets, where contributions are allocated towards staffing and some operational costs. Capital costs remain a challenge for both divisions to secure.

Further compounding these difficulties are funding cuts and increasingly stretched budgets, partially due to COVID-19. Divisional representatives expressed frustration with the tools available to help secure funds, noting that Section 37 was not used to acquire fire halls, despite it being a need. Accordingly, the Division is currently conveying these concerns to the City's community planners.

The availability of public land was the other constraint, where only limited amounts can be activated for emergency mixed-use projects. Sites that are not seen as "low-hanging fruit" would likely not be considered.

These limitations reinforced the value of partnerships, both in the provision of emergency facilities and in operations. In addition to forming partnerships, round table participants were interested in the financing arrangements to cover operational costs, including revenue generation on site.

4.0 PRELIMINARY DIRECTIONS

Based on the findings from the case studies and discussions held at the round tables, several high-level directions to help spur emergency mixed-use development have been summarized in this section.

Pairing of Uses

Combine Fire and Paramedic Services with Affordable Housing

Fire and Paramedic Services have been paired with just about every use (residential, retail, office, other city services) in development. However, the pairing of affordable housing with emergency facilities is emerging as a best practice in the provision of emergency mixed-use, evidenced by an ever-increasing number of cases. Additionally, this pairing is widely supported by round table attendees, who saw it as an untapped resource that can fulfill public needs.

Integrate police partnerships for future community-centric models of policing

Many municipalities, including Toronto, are moving towards community-centric models of policing. This form of policing was the only type of police services found in emergency mixed-use. Currently, the Toronto Police Services is undergoing reforms, where proposed changes focus on non-police alternatives, including community safety models. Though this would likely be a long-term consideration and not a current objective, a potential mixed-use partnership with a police facility dedicated for community outreach would be in line with the reform's objectives.

Streamlining City Processes

Although some cases of emergency mixed-use created in an ad-hoc manner were built in a timely period, the sheer size of Toronto's resources and governing bodies advocate for streamlined processes. The round tables revealed that much of the challenge lay in coordination efforts between City stakeholders. Drawing from the round table discussions, coordination efforts could include:

- Initiating working groups to hold conversations and to identify potential locations with partnership opportunity
- Devising a contained financing strategy that can divert sale proceeds of division resources (land or other) directly back into emergency mixed-use development
- Creating internal resources, such as templates to help with procurement, options for temporary facilities, and case study references
- Evaluating how existing financing mechanisms (i.e. Development Charges) and potential new tools (i.e. those permitted under Bill 108/197) can leverage new development to secure emergency mixed-use facilities.

Creating Awareness to Potential Partners

Communication to the broader development community is likewise important, as most round table attendees were not able to identify available partners. Similarly, prospective partners are also likely not aware of emergency service divisions as potential development partners. In most of the cases, emergency mixed-use projects were initiated by the City through public round tables, issued RFPs, or informal communication.

Without expending too much public resources, initial efforts for external communication may include publishing existing information on public websites and channels. This may include Darkhorse maps, conveying the desire for partnership, and creating easy-to-read content on the new service delivery model, including the difference between a hub and post. Similarly, it would be worth highlighting that posts, facilities with one or two bays, are the type of development desired for emergency mixed-use.

Consideration of Facilities on Private Land

The case studies showed many creative arrangements (strata, co-ownership, and long-term leases) used in the implementation of emergency mixed-use, with around half of the cases built on privately-owned land. While 18 poor condition and 10 high value redevelopment sites have been identified by the TFS (based on the 2018 Operating Budget Briefing Note), the availability of public land was still perceived as limited by attendees.

As round table participants were open to diverse lease and ownership arrangements, a strategy to engage private landowners may unlock land for emergency mixed-use. This may include initiating conversations with applicants of large development proposals, landowners of nearby sites to the existing facility, and landowners in areas recommended by the Darkhorse analysis.

Considerations for Project Implementation

In the event that an emergency mixed-use project is initiated, the case studies offer some guidelines for implementation.

Ensure public participation and transparency

Early and frequent discussion among stakeholders and active public participation are important not only to reach an optimal partnership agreement, but to also gain the public support needed to propel the project forward. Many municipalities executed third-party verification of construction costs, land value appraisals, or other project elements in a proposal to show that a fair deal had been made.

Outline Clear Expectations

Cases where an emergency mixed-use partnership and the responsibilities of each partner were clearly stated in the initial RFP led to projects with faster implementation timelines. However, RFPs that were non-prescriptive and open-ended provided opportunities for creative proposals leading to increased public benefits, despite the drawback of longer timelines (i.e. Victoria Fire Hall).

Set up Agreements to Optimize Operations

This includes putting in place agreements that promote self-sustaining operations. The most frequently used arrangement was the pairing of affordable housing with a fire hall, whereby the lack of land acquisition by the housing provider meant rental revenue was sufficient to cover most of the operating costs (i.e. Fire hall No.5, Potomac Yard Fire Station). Additionally, while the construction of efficient energy systems has higher capital costs, it was often pursued for the long-term cost savings.

Exploring Design/Construction Options

Early design and construction decisions made will significantly impact the remainder of the project. This includes consideration for modular construction, the phasing of the project, and the degree of green building elements present. These key design decisions may also provide increased flexibility. For example, Fire Hall No.5 was designed so that the emergency service component could operate as a standalone facility with the option of adding housing on its upper floors later.

5.0 NEXT STEPS

The findings from the case studies and round tables will help inform Phase 2. The final deliverable in Phase 2 is a final report that will provide best practice recommendations on the delivery of emergency mixed-use within the Toronto context. It comprises an analysis of high value and poor state of repair station sites, the development of a matrix that assesses financing and funding tools, and outlining potential delivery service model options. The recommendations will use demonstration concepts when possible and build off assumptions found in the preliminary directions identified in this report.

The high-potential development sites for the analysis component will be provided by CreateTO. While the full list is yet to be assembled, the following station sites will be included:

- Fire Station 244 - 2340 Birchmount Road
- Fire Station 333 - 207 Front Street East
- Fire Station 313 - 441 Bloor Street East
- Paramedic Station 45 - 135 Davenport Road
- Fire Station 115 - 115 Parkway Forest Drive- Joint Paramedics/Fire Station
- Paramedic Station 37 - 1288 Queen Street West
- Paramedic Station 54 - 4135 Bathurst Street

The School of Cities will continue to regularly engage with CreateTO staff and communicate updates as necessary throughout the duration of the project.

Fire Station 244 at 2340 Birchmount Rd

Fire Station 333 at 207 Front St E

Paramedic Station 37 at 1288 Queen Street W

6.0 APPENDICES

Appendix A: Fire & Paramedic Cases

LOUISE STATION, Calgary, AB

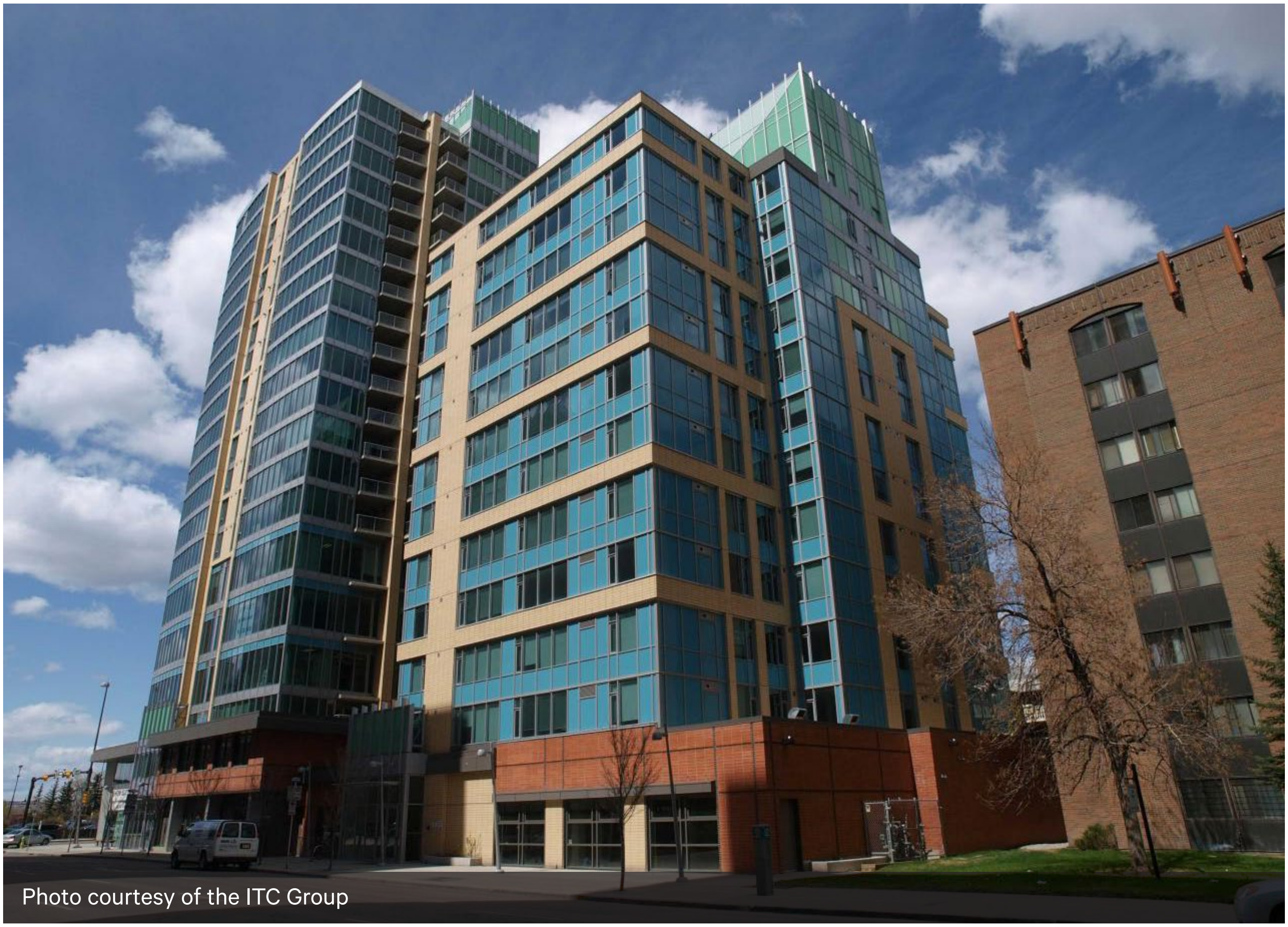

Photo courtesy of the ITC Group

Date of Completion:
2010

Size:
259,324 sq.ft.

- Fire Station: 13,886 sq.ft.
- Affordable Housing: 84,637 sq.ft.

Project Cost:
App. $44M (estimate)

Development Partners:
City of Calgary, The LaCaille Group

Description:

Louise Station is a fire hall and emergency health services facility located inside the podium of a mixed-use building with two 11 and 18-storey residential towers, known collectively as the Solaire Towers. The shorter tower contains 88 units of affordable housing units while the other contains 116 units of market housing units. Additional uses of retail space and office space are also incorporated within the development.

Partnership Model

The public-private partnership emerged out of several years of round tables hosted by the Mayor to address affordable housing. Out of this initiative, the LaCaille Group submitted a proposal to the City in 2006 calling for a partnership to redevelop a city-owned site. In return for the opportunity to build market housing on the subject site and the opportunity to own City land at another site, the LaCaille Group provided a new fire hall, emergency health station and 88 units of affordable housing. The affordable housing component was intended to replace and provide a net gain of units located at the City-owned site acquired by the LaCaille Group in the deal. Council approved the Louise Station Comprehensive Development on July 17, 2007.

Land

The City's expropriation of the corner parcel at the corner of the development site was necessary to gain ownership of the entire block and advance the development plan. The existing site, then occupied by a two-storey home, was acquired at an appraised value of $1.1M.

Subsequently, the LaCaille Group made two land purchases from the City. The first purchase was at a cost of $2.7M for the strata parcel containing the market tower housing. It was one of five strata titles created for the components of the project. The second was for the city-owned parcel, 727 1st Avenue, located approximately 750m away from the subject site as part of the agreement. It was occupied by an affordable housing tower with significant operational and maintenance challenges. Under the condition that the City would reimburse demolition costs, the LaCaille Group purchased the parcel for $4.5M after the fire station project was fully constructed. Sale proceeds then went back into Program 489, the City's affordable housing program, to further finance additional project costs or to fund other projects.

Champions

Peter Livadities, Principal of The LaCaille Group
Office of Land Service and Housing, City of Calgary

Financing and Funding

Funds to pay for the construction of project components came from existing municipal programs. The land acquisition cost of $1.1M and construction cost of $12.6M to build the new Fire Hall and Alberta Emergency Health Station were covered by the Fire Program, Program 041. $16.5M from Program 489, $12M from the Provincial Affordable Housing Funding, and $4.5M from Corporate Housing Capital Reserve were secured for construction costs of the affordable housing component. Sale proceeds of the strata parcel of $2.7M that were transferred to Program 489 were also used to offset further project costs.

Operations

Though comprehensively designed, the finished development and their independent uses operate as three separate buildings. The affordable housing component continues to be operated by Calgary Housing Company, a subsidiary of the City.

Other notes and lessons learned

- The City's decision to sole-source the project was highly criticized. The public sentiment was that the City could have gotten a better deal with more affordable housing. Additionally, the sale of 727 1st Avenue only had a sale proceed of $1.2M rather than $4.5M, due to expensive demolition costs covered by the City. In response, the City agreed to use a transparent procurement process to find future private-sector partners in affordable housing projects rather than enter no-bid contracts.
- The push behind the partnership decision was the anticipated 61% growth in population and a high need for new emergency services facilities as the two existing fire stations downtown were operating in full capacity.
- The Development Agreement recognized the need for an expedient delivery to move forward with commercially competitive costs and manage risk for the City.
- The subject site was selected because it was the only one that met Fire / Paramedic location criteria with adequate access and egress.

FIRE HALL NO.5, Vancouver, BC

Photo by Dan Toulgoet, courtesy of Vancouver Courier

Date of Completion:
2019

Size:
43,000 sq.ft.

- Fire Hall No.5: 13,000 sq.ft.
- Pacific Spirit Terrace: 33,000 sq.ft.

Project Cost:
$22.37M

Development Partners:
City of Vancouver, Vancouver Fire and Rescue Services, YWCA Metro Vancouver

Description:

The LEED certified Fire hall No.5 and Pacific Spirit Terrace project is a six-floor building with a fire hall on the first two levels and 31 affordable housing units on the remaining upper floors. The housing is exclusively dedicated for low-income single mothers and their children.

Partnership Model

The City of Vancouver entered into a partnership with the non-profit YWCA Metro Vancouver for the construction of the fire hall and affordable housing mixed-use project. It was the result of an RFP issued in 2013 that intentionally sought out to partner with an organization to provide affordable housing. The City lead the development process, acting as the lead funder and providing the land component.

Land

No additional land acquisition was required as the subject site hosted the former Fire Hall No. 5.

Champions

Melanie Marchand, Main Planner
Arthur Mills, YWCA

Financing and Funding

The cost of the new fire hall was covered by the City, who contributed $11M our of a total approved budget of $13.1M.

The affordable housing component cost $11.37M and was funded through City contributions of $6.6M from the 2014 Capital Budget for affordable housing and YWCA fundraising efforts. The YWCA fundraising campaign secured $2.3M through YWCA donors, $0.9M from the Streetohome Foundation of $0.9M, and $1.3M from BC Housing.

Operations

Under the City of Vancouver's ownership, the residential floors are under a 60-year lease with the YWCA. BC Housing holds the lease for 4 units with the YWCA.

The project agreements were intended to be self-sustaining without any further operating subsidies. YWCA is responsible for all operating and capital maintenance cost related to the leased space, contributing an operating endowment fund of $1M, in addition to the $2.83M contributed, to fund the on-site support services. This operating endowment fund will be raised over time, largely through undesignated bequests. An agreement was also entered between the city and YWCA on an operating model to ensure financial sustainability and operating viability of the housing component. Rent revenue was incorporated into the agreement, which cover operational costs.

As operating surpluses are generated, they will be split 50-50 between the City and YWCA after contributions to top up the capital replacement reserve and to build an operating reserve. These may be used to enhance affordability on-site or be invested in other affordable housing projects within Vancouver.

Other notes and lessons learned

- Direct contribution of rent revenue towards operational costs was made possible from the lack of mortgage and loans.
- Noise concerns were addressed through design and operational policies. Heavily insulated exterior walls for soundproofing were integrated into the design, and sirens were not to be sounded until two blocks away.
- The 24/7 operations of the fire hall serve as an additional layer of protection and 'eyes on the street' for the residents, who are a vulnerable group.
- The upfront vision of the project as a sustainable mixed-use fire hall with affordable housing units may have contributed to the relatively fast planning and implementation timeline – it was designed and built in around 5 years, where the first pre-application was made in 2014 and construction was finished in 2019.
- The success of this model has spurred the mixed-use transformation of other stations in Vancouver, including Fire Hall No.4 and Fire Hall No.9

WEST END SQUARE 50, Washington, D.C.

Photo by Enrique Norten, courtesy of TEN Arquitectos

Date of Completion:
2017

Size:
96,810 sq.ft.

- Fire Station: 19,085 sq.ft.
- Squash Club: 33,000 sq.ft.
- Affordable Housing: 55,226 sq.ft.

Project Cost:
App. $55M (estimate)

Development Partners:
DC Office of the Deputy Mayor for Planning and Economic Development, Eastbanc-W.D.C. Partners, LLC

Description:

West End Square 50 is a LEED certified mixed-use building that integrates an at-grade fire station underneath a squash court, other commercial uses, and 6-storeys of 55 affordable housing units. It was constructed as part of a two-site development. The nearby Square 37 site was developed into another mixed-use building with a world-class library and retail uses in the podium and two towers containing a total of 164 units of luxury condominium units.

Partnership Model

After winning a competitive bid process issued in 2009, Eastbanc Inc. entered a partnership with the District Government to replace a fire station and public library in poor condition. The agreement was made through a Land Disposition Agreement (LDA) approved the following year, which concerned the parcels at Square 37 and Square 50 (the four parcels housing the public facilities). Under the agreement, Eastbanc Inc. gained ownership of the three lots comprising Square 37 and were relieved of some zoning by-law requirements in their Planned Unit Development (PUD) application. This allowed them to build a denser and taller condominium development. In return, Eastbanc Inc., agreed to replace and expand the deteriorated public facilities. A new mixed-use facility containing the fire station underneath a squash court and 55 units of affordable housing was built on Square 50's single parcel. Additionally, a new West End library was constructed as the podium of the Square 37 luxury condominium development.

Council passed the West End Parcels Development Omnibus Act later that year, which authorized the project to move forward. The Act called for the establishment of a Maintenance Fund for depositing tax revenues, a Maintenance Agreement between the public tenants, and exemptions of the design and development from certain procurement laws among other agreements.

Land

As part of the Land Disposition Agreement, the ownership of the three lots comprising Square 37 were transferred to Eastbanc Inc. for $20M despite an appraised value of $30M. While they contained two public facilities, a library and a police station, the parcels were declared as surplus public land by the Mayor and only the library was replaced. Air rights were then sold to the developer (less the air rights necessary for the new library) with easements, covenants, and other property rights reserved to support the operation of the new library. The single lot comprising Square 50 remains under ownership of the District Government.

Financing and Funding

A significant amount of local public investment was secured. Council initially approved $15M in short and long-term bonds from the Department of Health Care Finance in 2013. An amount of $1.5M reprogrammed from the Department of Corrections was also made available to pay for a temporary fire station. Additionally, the following agreements were secured for affordable housing:

- A $4.3M loan agreement from the Department of Housing and Community Development (DHCD) and the Housing Production Trust Fund (HPTF)
- $6.6 in "Paygo Capital Funds" redirected by Council to the operating budget to offset long-term borrowing costs
- A $57,564 per year contract between the D.C. Housing Authority (DCHA) and the development team to supplement a program to provide the affordable rental units
- A $7M 40-year loan from the Office of the Deputy Mayor for Planning and Economic Development

Other miscellaneous funds were added in 2016, when Council allocated an additional $200,000 of the city's budget for a new library collection.

Operations

The three separate uses are reflected in the design and operations of the development. The City is responsible for the operating expenses of the fire station and library facilities using the Maintenance Fund that was created as part of the project. Additionally, in response to public pushback in 2016, 85% of the deed and recording taxes on sales of units in the building ($4.5M) was placed in this fund. The affordable housing component is managed by the developer, who is responsible for leasing to qualified tenants (under definitions provided by the City) and for maintenance and operations expenses.

Other notes and lessons learned

- The project's dragged-out timeline was caused by the strong public resistance in response to the no-bid contract issued in 2007 (which was also awarded to Eastbanc Inc.) and delays in 2012 caused by activist groups who believed the developer's contributions were too low. The pushback resulted in an amendment to the Maintenance Fund to include $4.5M for maintenance of the fire station and library.

ONE FINANCIAL SQUARE, New York City, NY

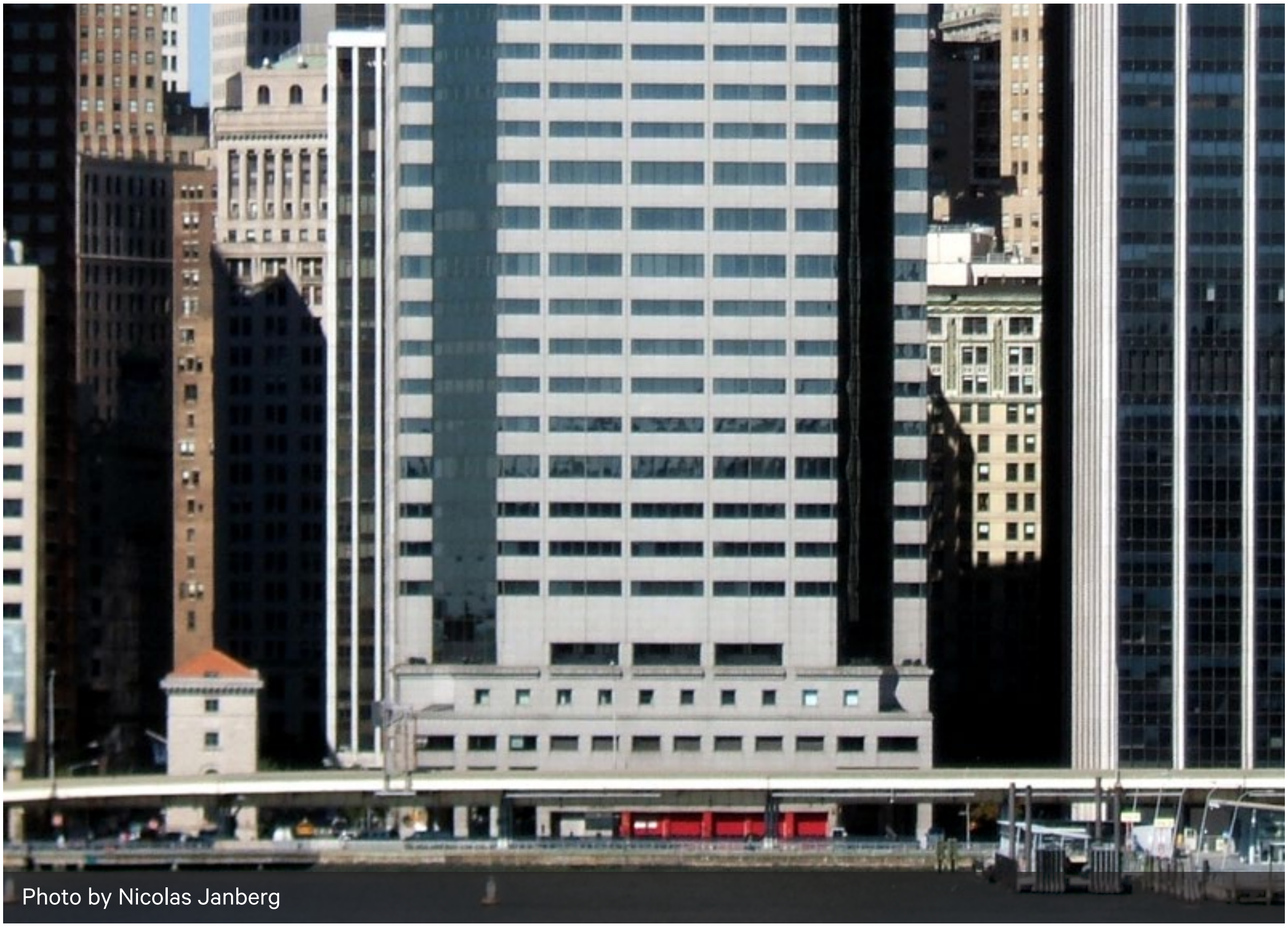

Photo by Nicolas Janberg

Date of Completion:
1987

Size:
1,161,435 sq.ft.

- Fire Station: 13,439 sq.ft.

Project Cost:
Unknown

Development Partners:
The City of New York, Assay Partners (c/o HRO International Ltd.)

Description:

One Financial Square is a 36-storey skyscraper in the financial district, built in the second and final phase of the overall project. It contains the Engine 4 fire hall underneath a tower of prime office space. Retail uses are also contained in the ground floor. An adjacent landmark site (publicly-owned block) was developed in the first phase, involving the creation of a new public plaza, the closing of a public street, and preservation of the historic police station.

Partnership Model

The subject development emerged out of a complex deal between the City of New York and Assay Partners, whereby two adjacent sites (one city-owned and one privately-owned) were developed. It involved four planning applications that were simultaneously reviewed and approved.

In summary, the agreements transferred development rights (air rights) from the merged city-owned lots to the adjacent parcel owned by Assay Partners, allowing them to build at a higher lot coverage of 75% with an additional 135,273 sq.ft. In return, Assay Partners covered costs to preserve the landmark Police Station, constructed a new public open space on the city-owned lot, provided a larger replacement fire house, and improved the overall streetscape. A long-term agreement was also established, giving maintenance responsibility for the newly-constructed public open space and the improved streetscapes to the developer.

Lastly, the agreement stipulated that phase 1, the public block, was to be completed prior to the development of phase 2, the One Financial Square skyscraper.

Land

No land acquisition was needed by the City. However, consolidation of the public parcels was necessary to transfer the collective air rights. These lots comprised an existing fire station, the First Precinct police station and an existing right-of-way that separated the facilities. The portion of the right-of-way between the facilities was de-mapped and all three parcels were merged into one lot. The full development rights associated with the consolidated lot area was then transferred to the privately-owned development site.

The mixed-use fire hall and office tower in the second phase was constructed on private land that had only recently been converted from public ownership. The parcel housed the last United States Assay Office and was sold at a public auction to HRO International Ltd. for $27M in 1983, one year before the planning applications were submitted.

Financing and Funding

Little information on the financing or funding of the project was retrieved. However, the proposed agreement provided a new facility without the expenditure of the City's Capital Budget funds and without costly lease or acquisition expenses. Additionally, the demolition of the existing fire station was at no additional cost to the City.

Operations

While the building is under private ownership, the two components are operated and maintained separately. The fire station takes up the ground floor, second floor, and mezzanine level on the south side of the building. After its completion, the City entered a 50-year lease at $10 per year with two 25-year renewal options.

A long-term maintenance plan was entered by Assay Partners for the preservation of the landmark building and open space on the city-owned site.

Other notes and lessons learned

- The unfolding of the project was contentious due to the controversial nature of the air rights transfer. The integration of a fire station at the base of the proposed second building was done in response to appease the public but was not a part of the initial proposal. Ultimately, the inclusion of the fire station was the deciding factor in the project's approval. The public good of the new station was perceived to outweigh the potential issues created by transferring air rights from the city-owned landmarks.
- Despite the controversy surrounding this project, it proceeded relatively quickly, whereby most of the decisions were resolved within a year. A reason for this may have been that the acquisition of a new or enlarged fire station had been a priority of the Fire Department for several years.

ONE TWENTY FIVE HIGH STREET, Boston, MA


Photo courtesy of Tishman Speyer

Date of Completion:
1989

Size:
1,800,000 sq.ft.

- Fire Station: 24,400 sq.ft.
- Ambulance Facility: 2,600 sq.ft.
- Office: 1,359,465 sq.ft.
- Retail: 15,920 sq.ft.

Project Cost:
App. $223,800,000M

Development Partners:
The City of Boston, Spaulding and Syle Company, the Prospect Company, New England Telephone and Telegraph Company

Description:

The Boston Fire Department Engine 10 Tower 3 is a mixed-use building with a fire hall and ambulance facility integrated at the base of a 30-storey office tower. It was developed as part of a larger redevelopment of the entire financial district block, known as One Twenty Five High Street, which contained a total of three mixed-use buildings connected by an 11-storey landscaped interior atrium.

Partnership Model

In 1987, the City of Boston entered into a partnership under a Development Impact Project (DIP) Agreement with the development team consisting of Spaulding & Slye, the Prospect Company, and the New England Telephone and Telegraph Company. In exchange for the option to purchase and redevelop a prime financial-district block at higher densities, the developer built a $4M firehouse on the first two floors of a new high-rise office tower in addition to providing a range of public benefits. These included upgrading the sidewalks and streets, restoration of the 19th-century buildings, the creation of exterior arcades, providing 150 public parking spaces, creating a public atrium, contributions of $7.5M in Linkage and Jobs fund and a $75,000 mobile 'jobstop' van as part of Boston's recruitment program. An additional $4.2M was also anticipated to be brought in by yearly real estate taxes. The new station was intended to replace and expand the existing fire hall.

Land

The developer had existing ownership over the existing 16-storey office building on the subject site. The remainder of the block was comprised of two additional parcels, one privately-owned and one publicly-owned (the former fire station site). The acquisition of these lands was necessary to move the project forward; the private parcel was acquired for $55M and fire station parcel was acquired for $3M.

Champions

Peter Small, president of Spaulding and Slye Company
Brian K. Gabriel, vice president of the Prospect Co. – was the director of the local development activities

Financing and Funding

The development team was able to solicit proposals from 25 financial institutions to provide the necessary $450M in financing. While complex, this process only two months.

Operations

The Boston Fire Department entered a long-term lease that started in 1989 with the firehouse operating as a self-contained unit.

Other notes and lessons learned

- The two-year review process, which involved professional and public participation was necessary to optimize the private and public benefits. This also led to no opposition during their public hearing for zoning changes.
- Over $6.2M was saved in cost savings through aggressive value engineering.
- The interior atrium was an opportunity for the City to provide year-round quality public space.
- The Development Impact Project Plan was also written to incorporate flexibility in the type of public benefits that could be provided on top of the minimum requirements. Though the developer ended up contribution $7.5M in linkage payments, they also had the option of providing affordable housing for low income to satisfy a part of that obligation.
- The building later obtained a LEED Gold certification.

BEAVER BARRACKS, Ottawa, ON

Photo courtesy of Hobin Architecture

Date of Completion:
2012

Size:
71,700 sq.ft. (Paramedic development only)

Project Cost:
$65M

Development Partners:
City of Ottawa, The Centretown Citizens Ottawa Corporation (CCOC, non-profit)

Description:

The LEED certified mixed-use building at 424 Metcalfe St. integrates a paramedic post into the base of 72 affordable housing units. It is one of five affordable housing buildings built around a community garden and public art installation. The full master-planned development, known as the Beaver Barracks Development, contains a total of 254 affordable units.

Partnership Model

An agreement was entered with the Centretown Citizens Ottawa Corporation (CCOC), a non-profit and successful proponent of an RFP issued in 2007. The RFP called for the redevelopment the subject site, also known as the Beaver Barracks site, to incorporate affordable housing. In exchange for the provision of land, confirmed capital funding, and a number of fee exemptions, CCOC built 254 units of affordable housing, a community garden, and a replacement ambulance station.

Land

The former military Beaver Barracks site was acquired by the City through a land swap with the Department of National Defense and the National Capital Commission during the 1990s. The site was intended to be repurposed for social housing but affordable housing funding cuts in the mid-1990s left the City without any immediate plans for the site. As a result, a stand-alone paramedic post was approved and built in 2004 as the site was strategically positioned to fill a gap in paramedic services.

When the final agreement between the City and the Centretown Citizens Ottawa Corporation (CCOC) was made in 2007, the subject site was sold to the non-profit for $1. It was estimated to have a market value of $5.3M.

Champions

Catherine Boucher, CCOC
Diane Homes, City Councillor
Doug James, Planner

Financing and Funding

To fund this project, the CCOC used various social financing strategies, including government grants, loans, credits and rebates, and internal financing. $19M was received in combined federal and provincial funding as part of the Canada-Ontario Affordable Housing Program and $12M was received from grants and other contributions from the City of Ottawa. Through debenture agreements, $31M was also secured with Infrastructure Ontario. Special arrangements were also arranged with a religious organization, where CCOC was able to secure $1.5M in low-cost mortgage financing at 2% per year. The remaining financing of $2.24M came through an internal loan mechanism by CCOC.

In addition, the design charette in the early phases of the project revealed that initial energy saving features proposed did not have the desired performance impact. As a result, CCOC negotiated a 25-year agreement with a geothermal provider, who became a third-party owner of the geothermal system to offset the financing and servicing costs.

Operations

The two components of the building are operated separately, with the Ottawa Paramedic Services in a long-term lease with CCOC. Over 70% of CCOC's revenue comes from rent (either tenant or city-subsidized) and the remainder comes from a small mortgage subsidy from the Province (16%) and fees from various services (12%). Most of the CCOC's operating revenue comes from this rent. The remaining operational costs are covered by provincial subsidies and miscellaneous revenue from parking, laundry, and commercial rent.

Other notes and lessons learned

- Because the existing paramedic post had only been in operation for four years, the project had to weigh the benefit of building brand new building against other options to manage paramedic operations and provide for affordable housing.
- While funding was not provided for sustainable features, the project was built to LEED Gold standards with a cost-effective and energy-efficient system. However, the geothermal system was largely expensive; CCOC has decided to place emphasis on passive design in future projects instead.
- The project relied heavily on grants being available from the government, where an independent audit executed by the City showed that the development will begin to generate a surplus after five to ten years of operations

POTOMAC YARD STATION, Alexandria, VA

Photo by Jeff Schlossberg, courtesy of Plan Place Blog

Date of Completion:
2009

Size:
169,000 sq.ft.

- Fire Station: 22,000 sq.ft.
- Affordable Housing: 147,000 sq.ft.

Project Cost:
$34M

Development Partners:
City of Alexandria, Pulte Homes and Centex Homes (c/o Potomac Yard Development, LLC)

Description:

Potomac Yard Station is a LEED and Earthcraft certified mixed-use facility with at-grade fire hall and retail space uses underneath four storeys of affordable housing units. It is a part of the much larger 167-acre Potomac Yard Development Plan, a new mixed-use community with 1,700 residential units, 1.9 million sq.ft. of office space, 120,000 sq.ft. of retail space, and a hotel.

Partnership Model

The City's review of the developer's initial submission of the Potomac Yard development plan in 2006 quickly led to the realization of challenges for the delivery of emergency services. In response to the City's concern, the developer requested additional approvals in 2007 to provide a mixed-use fire station project. The partnership agreement was an unconventional density bonus request, where the developer agreed to donate approximately 37,600 sq.ft. of land to the City and $6.6M to construct the mixed-use fire and affordable housing project. No reciprocal action was required of the City; the developer gained no additional benefit apart from timely approvals for the Potomac Yard development.

Land

The land was donated by the developer for the purpose of constructing a new fire station. At around 37,600 sq.ft., the acquired public parcel only comprised a small portion of the much larger 167-acre site, which was purchased for $105M in 2004 by Pulte Homes and Centex Homes.

Champions

Mark Jinks, City Manager
Steve Coniglio, Director of acquisitions – Pulte
Bill Hendrickson, chair of the Potomac Yard Design Advisory Committee
Eileen Fogarty, Director of Planning and Zoning

Financing and Funding

The fire station project was built through public and private funding. As part of the agreement, the Potomac Yard Development LLC donated $6.6M for the construction of the fire station component. The City supplemented the fire station's construction cost with an additional $1M in order to add the extra ambulance bays.

An additional $7.5M from developer affordable housing contributions, $8.6M in tax credit equity (from the City's Low-Income Housing Tax Credit program) and $8.35M in loans from the Virginia Housing and Development Authority (VHDA) was used to finance the 64 units of affordable housing on-site. The remaining $750,000 for the retail and related parking was financed through commercial lending mechanisms done through the Alexandria Housing Development Corporation (AHDC).

Operations

The Alexandria Housing Development Corporation (AHDC), a non-profit housing development entity formed by the City, was designated the responsibility to develop, finance, own and operate the residential and retail components of the project. The project continues to be self-sufficient, where the rental revenues cover ongoing operating and management expenses, taxes, insurance, and maintenance costs and any debt service.

The fire station is operated and maintained separately under the Fire Department.

Other notes and lessons learned

- Time was the main reason for the generosity of the developers. As the whole Potomac Yard Master Plan had taken several decades to form since 1987, creating and implementing a smooth development plan seemed straightforward after the its final approval. After acquiring the parcel in 2004, Pulte and Centex had intended to break ground by 2006. However, the issue of a much-needed fire and rescue facility was raised. To preserve the City's urban design concept and to maintain their own phased development schedule, the developer offered the mixed-use fire station proposal with contributions of land and funding for construction.
- By removing the land cost for this project, it was possible to generate a significantly higher number of affordable units at little expense to the taxpayer.
- The affordable housing component was proposed after the fire station proposal as City planners felt the land was not being used to its maximum potential.
- This is one of the earliest fire station integrated with affordable housing in the States, built one year before Louise Station in Calgary.

PROJECTS IN CONSTRUCTION

VARSITY MULTI-SERVICE REDEVELOPMENT, Calgary, AB

Image courtesy of MBAC

Anticipated Completion:
2021

Size:
35,000 sq.ft.

- Fire Station: sq.ft.
- Affordable Housing: sq.ft.

Project Cost:
$31M

Development Partners:
City of Calgary, Calgary Housing Company

Description:

The Varsity Multi-service Facility is a 6-storey mixed use development containing a replacement Fire Hall and Emergency Medical Services facility, a household hazardous waste drop-off facility, commercial retail, a child care facility and 48 units of affordable housing.

Partnership Model

In 2015, Calgary City Council directed Administration to move towards a coordinated approach for planning and delivering civic facilities that optimize the use of City-owned land. Under the Integrated Civic Facilities Program (ICFP), created a comprehensive integrated redevelopment plan to replace the existing Fire Station, which was at the end of its lifecycle, and provide affordable housing to optimize the use of city-owned assets.

Land

The subject parcel is owned by the City and no land acquisition was needed. The existing site houses the Varsity Fire Station no.17 to be replaced.

Financing and Funding

Funds were allocated in the capital budget for the redevelopment of the fire station. Council approved the transfer of $19M funded by Municipal Sustainability Initiative (provincial program for local infrastructure) and developer and other contributions for the construction and management of the Varsity Facility. Additionally, $12M from the Affordable Housing Development program was secured for construction and maintenance.

Operations

The Calgary Housing Company (CHC), the City's subsidiary organization to manage affordable housing, will be operating the units after construction is completed. Most of the uses within the building are intended to operate and function separately, with the exception of a small social space and shared lobby in the middle of the building.

Other notes and lessons learned

- This project demonstrates the ability of the City to optimize municipal land without outside partners through the integration of multiple city facilities

VICTORIA FIRE HALL, Victoria, BC

Image courtesy of Jawl Residential Properties

Anticipated Completion:
2023

Size:
162,736 sq.ft.

- Fire Station: 41,700 sq.ft.
- Affordable Housing: 98,543 sq.ft.

Project Cost:
$35.9M

Development Partners:
City of Victoria, Dalmatian Developments, Pacifica Housing

Description:

The Victoria Fire Hall is a 12-storey tower houses a new Fire Hall and Emergency Rescue Facility (known collectively as the Emergency Operations Centre) underneath 130 units of affordable housing. It is part of a larger master-planned community in the downtown core, which will contain three additional mixed-use towers (at 14, 15, and 17 storeys). The remainder of the development comprises of market housing, commercial retail, and office space uses.

Partnership Model

In 2018, Dalmatian Developments entered into the City's first partnership with a private developer to build the Emergency Operations Centre and affordable housing component of the project. The new fire station is being built on privately-owned land in close proximity to the existing fire hall. Under the Purchase and Sale Agreement, the City was guaranteed a maximum price of $33.7M to purchase the two floors housing the Emergency Operations Centre, interior furnishings, permits and development costs, and the multi-use space shared with BC Emergency Health Services (BCEHS). In return, the nine parcels comprising the entire block were upzoned to allow for greater densities for the overall development.

Land

Additional land was not required by the City. Instead, the City purchased the freehold title to the Fire Station ASP. The current fire station at 1234 Yates Street will be decommissioned when the new Emergency Operations Centre opens, but will remain as municipally owned land. The overall master-planned development site comprises nine lots.

Champions

Dave Jawl, Director of Dalmatian Developments
Miko Betanzo, Senior Planner)

Financing and Funding

While the Purchase and Sale Agreement guaranteed the City a maximum price of $33.7M, additional costs for off-site servicing, sidewalk improvements, equipment, and project management brought the final cost up to $35.9M. The City's contributions are funded through the City's Debt Reduction Reserve, which functions as an internal loan fund. As a result, no tax increase was needed for repayment nor were additional grants required from senior levels of government.

To cover construction costs for affordable housing, Dalmatian Developments and Pacifica Housing were able to secure $19M from the Building BC Community Housing Fund along with annual operating funding.

Operations

The two components of the mixed-use development will be operated and managed separately, where the Emergency Operations Centre will be operated by the City and the affordable housing component by Pacifica Housing, a non-profit provider of affordable housing. BC Emergency Health Services (BCEHS) will enter a 20-year lease from the City to operate a stand-alone facility for paramedics and four ambulances once construction is complete. The lease is anticipated to provide approximately $2.6M from BCEHS over the lease period, which will recover some construction costs and pay for operations.

Other notes and lessons learned

- The City adopted an innovative approach with their RFP, which was open to almost all ideas in forming a partnership to replace the old fire station. The disadvantage is that the project took around ten years to realize.
- The guaranteed price deal of $35.9M by the developer led to no additional tax impacts or extra financing from senior levels of government as the City was able to budget from existing funds. The City was able to save around $12M in the deal.
- Since the city negotiated directly with only one proponent, they took additional measures to hire third-party reviewers to ensure the deal was fair. PricewaterhouseCoopers and was commissioned to undertake a Value for Money (VFM) assessment. Johnson Davidson Architecture was also hired to review the building design and operational performance.

RIVERE (RIVER NORTH FIRE STATION), Chicago, IL

Image courtesy of Friedman Properties and Goettsch Partners

Anticipated Completion:
2023

Size:
674,000 sq.ft.

- Fire Station: 30,000 sq.ft.
- Office: 614,000 sq.ft.
- Retail: 50,000 sq.ft.

Project Cost:
$20M (for fire station)

Development Partners:
City of Chicago, Friedman Properties Ltd.

Description:

The Rivere project is a new mixed-use building containing an expanded 3-storey fire station with two ambulance bays underneath a 30-storey office tower. It replaces the existing Engine Co. 42 fire house and serves the fast-growing River North community.

Partnership Model

The Redevelopment Agreement was entered in 2018 between the City of Chicago and Friedman Properties Ltd. to construct a new replacement fire station as part of a 30-storey mixed-use building. The Development Agreement required the developer to pay $20.2M for the new firehouse and contribute $10.9M to the City's Neighborhood Opportunity Bonus System, a program that supports commercial development, landmark protection and infrastructure improvements in underserved neighbourhoods. In return, the City allowed the development to be built at greater densities and sold the public parcels housing the existing fire station lot and an adjacent laneway to the subject site for $5M.

Land

The acquisition of the City-owned parcel by Friedman Properties Ltd. was necessary to move the project forward. As part of the Redevelopment Agreement, the City sold the 14,600 sq.ft. fire station site and the 3,150 sq.ft. alleyway adjacent for $5M, granting the developer full ownership of the entire block. The title for the remaining air rights, including a density bonus, will be transferred to the developer after the construction of the replacement fire and ambulance facility.

Champions

Albert Friedman (of Friedman Properties)
Alderman Brendan Reilly (42nd ward)?

Financing and Funding

The construction of the new fire station and office tower is being funded by private money.

Operations

The components of the project, the new firehouse and the office tower, are operated and maintained separately. The alleyway that was acquired in the development agreement will be used to access the new fire station and loading for the remaining office tower will also be done through the alley running south of the parcel.

Other notes and lessons learned

- By partnering with a private development team, the City was able to save $15M in taxpayer money. Further costs were saved as the City was not required to pay for demolition of the existing fire station.

Appendix B: Police Services Case Studies

MAMAWEYATITAN CENTRE, Regina, SK

Photo by Patricia Holdsworth, courtesy of Canadian Architect

Date of Completion:
2017

Size:
108,000 sq.ft.

Project Cost:
$42.2M

Development Partners:
Regina Public Schools, City of Regina, Regina Public Library

Description:

The Mamaweyatitan Centre is a multi-use services hub located in north-central Regina. It houses a high school, a community policing centre, a child-care centre, recreational complexes, a public library branch, various food programs, a First Nations elders' ceremonial room, space for community associations, a recording studio and a commercial kitchen area.

Partnership Model

The Regina Public Schools, City of Regina, and Regina Public Library entered a unique partnership to construct and operate the new community centre. The Mamaweyatitan centre is located in a marginalized area of Regina and was built to meet community-identified needs for collaboration between the community and City and to provide needed resources.

Land

The facility is built on public parcels owned by the City of Regina and Regina Public Schools - no land acquisition was required. One of these parcels housed the former Scott Collegiate that was demolished for this project. The parcel of land was valued at $3M and was donated to the project.

The City and the School Board co-own the land of the facility as tenants-in-common. The building is also co-owned among the three partners, whereby the School Board owns 73%, the City owns 21%, and the Regina Public Library owns 6%.

Financing and Funding

The construction of the new school facility was heavily supported by the Province, who contributed $31M to pay for the high school and childcare centre. Funding for the new Community Learning Centre was provided by the City at $8.8M. Lastly, the Regina Public Library contributed $2.4M for its new branch.

Additionally, a second partnership between the Saskatchewan Roughriders (football team), the Mosaic Company, and the Mamaweyatitan Centre was arranged whereby the Roughriders and the Mosaic Company donated $100,000 to build the outdoor Indigenous ceremonial gathering space (named "Heart of the Site").

Operations

The community policing station is leased to the Regina Police Service Community Engagement Unit, whose work comprises community outreach programs, public education, and participating in community activities. Though the office is not designed as a shared space, it is accessible from one of the multipurpose rooms within the centre. Its location within the centre is strategic to the unit's goals.

As listed under the Master Agreement, the three partners are responsible for the operations and maintenance costs for the Centre. The costs for common spaces are split proportional to the ownership percentage of each partner in the overall facility, whereby the school Board pays 70%, the City 25%, and the Public Library 5% of the total operating costs. The School Board is also responsible for the maintain and repair of the overall facility's exterior grounds, parking areas, sidewalks, and replacement of building systems.

Other notes and lessons learned

- The centre was built after a long process of negotiation that took 14 years. The process of establishing trust with community members, who were largely Indigenous and lower-income was necessary to the success of the project. However, the disadvantage of the long implementation process was that some funding dependent on provincial funding was cut, which resulted in the loss of a health clinic and food store that were originally planned.
- The project is a conflation of potentially conflict-generating uses inside a single complex, which speaks to the importance of strategic design. The research and public discussions held contributed to the longer timeframe but served as an important to the overall project. While many spaces served different user groups simultaneously, rooms were also designed to be accessible for one user group.

PROJECT IN CONSTRUCTION

COQUITLAM YMCA, Coquitlam, BC

Image courtesy of Concert Properties

Anticipated Completion:
2022

Size:
58,700 sq.ft.

Project Cost:
$101.1M ($57M in City contributions)

Development Partners:
City of Coquitlam, YMCA of Greater Vancouver, Concert Properties

Description:

Located around the recently completed SkyTrain station (2017), the Coquitlam YMCA is a community recreation centre that contains a community policing station, recreational and athletic facilities, a daycare, multi-purpose spaces, studios, cafes, and an underground parkade. It is part of a larger 8-acre redevelopment comprising 8 mixed-use towers with affordable, rental, and market units and commercial uses.

Partnership Model

In 2016, an Agreement-in-Principle was negotiated, forming a tri-party partnership between the City of Coquitlam, the YMCA of Greater Vancouver, and Concert Properties. The developer's project entails 8 mixed-use towers containing around 2,700 homes.

In exchange for the additional density, Concert Properties is providing affordable housing and community amenity contributions worth over $100M. This includes approximately 900 rental and 100 below-market rental units. They will also be responsible for providing significant improvements to the public realm, including the expansion of the existing Cottonwood Park to almost double its size for a total of 4 acres. An additional $700,000 in contributions for park improvements are dedicated to new sports fields, courts, and outdoor furniture within the park.

The City's deal with the YMCA is a 50-50 co-ownership agreement. Despite construction costs being split fairly evenly between the two partners, the City is able to pay for most of it through developer contributions. The final complex will house a new Community Police Station, providing a permanent home to a nearby leased police station.

Land

A key component of the agreement was a land swap, where the city-owned 1.3 acre parcel at Burquitlam Park was exchanged for a 2.55 acre portion of land owned by Concert Properties next to Cottonwood Park. The newly converted city-land was necessary for the expansion of Cottonwood park, and the parcel obtained by Concert Properties is the subject site for the YMCA mixed-use facility.

Champions

Brian McCauley – Concert Properties president

Financing and Funding

The total project cost is anticipated to cost $101.1M, with the City's share being $57M. Costs are broken down into components of: the YMCA Facility ($76.5M), the Community Police Station ($4.7M), the Park-and-Ride ($11.6M), off-site improvements ($8.3), and additional costs ($3.7M).

The $76.5M YMCA Facility component will be paid by the City (through developer contributions) and YMCA. The City of Coquitlam will collect $38.3M from the developer in the form of Community Amenity Contributions (CACs) at no additional cost to taxpayers. The YMCA will contribute the remaining amount of $38 for the facility's construction, which will be multi-sourced, including a community capital campaign.

Costs for the Park-and-Ride are split between the Concert Properties and the City, split $6.1M / $5.5M respectively. Each party will also pay half of the off-site improvements.

The City will also be solely responsible for the Community Police Station at a cost of $4.7M and contribute an additional $3.7M for general costs.

Operations

YMCA is a 50% capital and 100% operating/asset replacement partner, owning half of the YMCA Facility but holding full responsibility for its management, including operating costs and asset replacement.

Outside of the facility, the City will contribute $3.85M to the non-profit 43 Housing Society for the operation of the 100 affordable housing units.

Other notes and lessons learned

- The project had a long planning process (over five years) because of the significance and anticipated growth of the neighbourhood for the next 20-25 years. Extremely high cost-savings were obtained, however, the additional years taken for planning increased costs of the YMCA facility by $13.3M (initially $25M in 2015). This was resolved with a longer repayment term for the CACs by several years.
- The entire project is expected to result in a range of cost benefits to the City estimated to be in excess of $250M for the entire life of the project through financial contributions, asset value, and cost-savings. Key to achieving these benefits is the 50/50 co-ownership agreement, despite the Community Police Station only comprising 3,700 sq.ft. of the facility.

Appendix C: Case Study References

Louise Station

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