



Impact Assessment

URBS 480 Winter 2024
Zone 5: NDG

Project by:

Pierre-Luc Gingras - Historic, Econ., & Legal

Emma Chin-Sopora - Bio & Physical Env.

Yan Hui (Dawn) Wong - Social & Cultural Env.

moneo
Consultancy Group

Table of Contents

Acronyms	3
Abstract	4
Targeted Area	5
Historical and Economic Considerations	6
History	6
Economic and Legal Implications	8
Impacts and Indicators	10
Conclusion	11
The Social and Cultural Environment	12
Combined Demographics Overview	12
Community Dynamics and Social fabric	14
Livelihoods	15
Challenges and opportunities	17
Conclusion	18
Bio+Physical Environment	19
Background	19
Traffic and Transport Implications	20
Noise and Air Pollution	22
Soil & Waste	24
Water	24
Heat Island and Footprints	25
Conclusion	26
Final Reflection	27
Remarks on the Research	27
Monitoring change in demographics	27
Monitoring sustainability	28
Monitoring traffic	28
Comments on Montreal 2030	29
References	30
Appendix A	36
Appendix B	38
Appendix C	45

Acronyms

ARTM - *Autorité Régionale de Transport Métropolitain* (Metropolitan Public Transport Authority)

CDEH - *Commission sur le développement économique et urbain et l'habitation* (Commission of the economic and urban development and housing)

CDNNDG - Borough of Côte-Des-Neiges-Notre-Dame-De-Grâce

CMM - *Communauté Métropolitaine de Montréal* (Montreal Metropolitan Community)

MAMH - *Ministère des Affaires Municipales et de l'Habitation* (Minister of Municipal Affairs and Housing)

MTQ - *Ministère des Transports du Québec* (Provincial Transport Minister)

OCPM - *Office de Consultation Publique de Montréal* (Public Consultation Office of Montreal)

PPU - *Programme Particulier D'urbanisme*

STM - *Société des Transports de Montréal* (Montreal Public Transport Authority)

TMR - Town of Mount Royal

TOD - Transit Oriented Development

Abstract

Royalmount and the hippodrome project are pivotal moments of urban transformation in local communities. By looking at these two projects, this report seeks to analyze and unravel the complex changes (past, present and future), by conducting a comprehensive study in Montreal, Quebec.

In 2015, the City of Montreal mandated the *Commission of the economic and urban development and housing* (CDEH) to analyze the impacts of Royalmount. The project is located in the Town of Mount Royal (TMR) and the proposal presents a mixed-used development including retail, offices, housing, entertainment district and a large central park. The first phase considers the construction of a 824000 square foot two-storey retail and lifestyle complex (Patterson, 2023). Due to the pandemic, the first phase is set to open in summer 2024. The Hippodrome development is a former horse race track, the area is located in the borough Côte-des-Neiges–Notre-Dame-de-Grâce (CDNNDG). The proposal presented by Office de consultation publique de Montréal (OPCM) offered a vision for transforming the reclaimed lot into a sustainable living environment, incorporating green infrastructure and water retention infrastructure (Ville de Montréal, 2023).

The methodology for this report consists of a mix of qualitative and quantitative research, such as secondary data analysis, and observation. While some graphic representations were taken from credible sources, others were made by the Consultancy Group to reflect the needs of the analysis.

The paper will begin with an introduction of developments, followed by a comprehensive analysis that is divided into three critical aspects: historical & economic considerations, environment, social & cultural environment, and biological/physical environment. We will address the impacts of projects before and after construction, along with navigating the critiques and challenges. The conclusion addresses both means of monitoring impacts and will relate both projects to *Montéal 2030: Citywide Strategic Plan*.

Targeted Area

As commissioned by the council, Moneō consultancy has conducted a detailed examination of the site (see Figure A1), with a focus on two key development projects: Royalmount and hippodrome. These were selected for their relevance to *Montéal 2030: Citywide Strategic Plan*, which aims to accelerate ecological transition, strengthen equality/inclusivity, promote democracy/participation, and stimulate innovation (Ville de Montreal, 2020). These two projects are clustered in and around the industrial area of TMR. They are contained within three major barriers: Highway 15, Highway 40 and the CN/CP rail yards. In addition, important commuter rails and the Montreal orange metro line pass through. The commuter rails currently do not stop in the region, instead directly traveling to the city periphery. These noteworthy barriers make these two projects vulnerable to perpetuating car centric development. Policy makers are also worried about the effects of densification and its possible repercussions on the transport networks currently bottlenecking at highway 15. Beyond this, these projects do not solely change the transportation landscape, but also serve as catalysts for physical, social, economic and ecological shifts in the communities.

Historical and Economic Considerations

Pierre-Luc Gingras

Lot size alterations are influential happenings that leave lasting impacts on communities. The subdivision of agricultural lots into urban fabric influences the future dwellers' quality of life. Once established, lot lines remain entrenched; enduring generations and sometimes outlasting the lifespan of buildings. Examples such as the hippodrome site and Royalmount both demonstrate important lot rearrangements in the urban fabric of Montreal.

The projected construction of new roads and access points are expected to change the study area for decades. Municipal bodies have access to many tools such as zoning regulation and subdivision control to limit harmful development patterns. Evolving definitions of sustainability also influence these projects, with master plans and working groups ensuring that the final structures reflect the physical and economic objectives of the city. This section is intended to explore the historical, economic and legal implications of both the hippodrome and Royalmount. The title omits the legal implications as the analysis is interwoven within the discussion.

History

The study area was an important agricultural hub of Montreal, with orchards, berry and melon fields rooted in quality soil. In 1907, the Blue Bonnet's hippodrome was inaugurated with a tram loop linking the institution to the city centre (OCPM, 2019, 2020). This institution became well established with a capacity for 1000 horses (OCPM, 2020). The surrounding fields and orchards were urbanized in the 1950s and 1960s with automobile centric ideologies leading the development (OCPM, 2020). Industries started to settle north of the hippodrome with highway infrastructure allowing inland factories to rely on regular truck transportation for inputs and outputs. In 1967 Décarie Boulevard was transformed into a highway (Hwy) and the monumental Hwy-40/Décarie interchange was built. Car centric development proliferated in the study area. Both stations Namur and De La Savane would open in 1984; however, their inauguration would not spark a shift from car centrality in the area (OCPM, 2020). Currently the Hippodrome site is surrounded by important barriers such as the CN and CP rail yards, rail lines, industrial districts and a sunken highway. This historical accumulation of dividing infrastructure has discouraged road development on the site and imposed a peripheral-like isolation.

In 2009, the Blue Bonnet's hippodrome closed; it was unable to maintain cultural and economic relevance (OCPM, 2019, 2020). The abandoned lot was repossessed by the City of Montreal in 2017 after five years of negotiations with the provincial government: the hippodrome structures were demolished quickly by the city (Dubuc, 2023). The structure did not have historic or monument protections at the time of demolition. City elections in 2017 ultimately led to a change of development orientations; increasing housing unit goals for the lot (Dubuc, 2023). In October 2022, a *call for tender* was published by the city for a 4208m² lot on the hippodrome site: around 4% of the total repossessed lot (Dubuc, 2023). None of the metropolis private developers placed an offer. An interviewed developer argued that the call for tender was overly vague, and overly expensive for a peripheral lot (10 million for the land). For-profit developers were further disinterested by the city's lack of an official drawn plan for the remaining 96% of the hippodrome lot (Dubuc, 2023). Considering this call for tender, subdivision of the lot and affordability were the main issues as the city lacked any formal allotment plans. In contrast, an earlier call for tender was directed towards non-profit developers: 4 applications were received. In May 2023, the city of Montreal confirmed 'Espace La Traversée' would be granted a contract to build up to 250 affordable housing units in a small portion of the lot (Agence QMI, 2023). Regardless of the lack of formal plans, non-profits have demonstrated their interest in developing on the site.

Concerning the historical appeal of the hippodrome site, municipal authorities have stated their intention to build the neighbourhood with imagery alluding to the history of the site. This centuries old land tenure is an easy narrative to integrate into the image of the development, making a meaningful and imaginable neighbourhood (placemaking). This history can become a point of intrigue and pride for those living in the proposed new neighbourhood. This development competes with the imageability of surrounding historic garden suburbs such as TMR, Hampstead, and new TOD developments like Le Triangle.

The Royalmount site is situated in a long standing industrial hub of TMR. Agricultural lots were converted to industrial lots during the first wave of urbanization in the region alongside highway 40: current buildings on the lots date from the 50s and 60s (CBC news, 2016). Historical maps explicitly state that this industrial agglomeration was under the administration of TMR since the 70s (Ville de Montréal, 1975). The cycle of 'business as usual' was disturbed in 2015 when Carbonleo announced the Royalmount development project to the public. This new

luxury shopping centre is expected to host a theater, hotels, condos, a cinema, office spaces, an aquarium, a water park, and more (Ville de Montréal, 2018). The 23 ha site is fully industrial: land acquisition was conducted between 2014 and 2017 (Ville de Montréal, 2018). Some pre-existing industrial structures will be integrated into the new complex; however, many industrial buildings on the site will be demolished to construct the new mixed-use complex (Carbonleo, 2018b). While the developer has stated the potential to integrate over 6000 residential units, TMR has no intention to rezone the industrial lots to accommodate new residents (Adenot, 2019; Town of Mount Royal, 2024b). In 2018, Royalmount's site zoning was amended for mixed use: industrial, commercial and institutional (Town of Mount Royal, 2024a). In all, the land use history of the study site helps explain the potential of these sites. The hippodrome preserved the quality of the lot for over 100 years, making the site a rare occasion for mass residential development on the island with little soil remediation required. Similarly, Royalmount engages with one of the busiest highway interchanges on the Island, harnessing the benefits that incentivized industrialization of the lots 70 years ago. Metro line expansions have made both sites increasingly accessible and admissible for sustainable development grants and endorsement.

Economic and Legal Implications

In 2015, Namur station was selected by the Communauté Métropolitaine de Montréal (CMM) as a key sector of TOD development. This designation gives development projects in the area financial support and larger government support (OCPM, 2019). This new legal recognition enabled collaboration between the MTQ, the ARTM, the MAMH, the STM and CMM (OCPM, 2019). TOD principles attempt to harmonize housing and commercial density with efficient transport infrastructure. Mixed and high density are common goals emerging from TOD, however formalized recognition becomes a vector for redevelopment. Other completed projects in the study area like 'Le Triangle' and 'Westbury' have received municipal endorsement to densify and promote TOD values (See Figures B1, B2).

Royalmount explicitly intends to create a new hub outside the central business district: 'midtown' (Carbonleo, 2018a). According to the developer, the new shopping experience would be complementary to current businesses and compete against online shopping platforms. This intention to decentralize shopping in the city and create a more competitive in-person shopping

experience has caused anxiety to nearby and local businesses (Carbonleo, 2018a). While this particular project is mainly within TMR's boundary, a small part of the project falls within CDNNDG. Moreover, zoning specifications require a PPU for every project in zone M-801-803: Royalmount is expected to cover these zones following its multi-phase construction (see Figure B3)(Town of Mount Royal, 2024a; Ville de Montréal, 2018). These cross-boundary implications resulted in agglomeration consultations. The city of Montreal (through the agglomeration) requested Carbonleo to conduct traffic assessments and economic assessments to measure the impact of the investment onto local residential, industrial and commercial land uses. These were requested under the premise of the PPU. According to these reports, Royalmount is expected to decrease city centre business activities by 6% (CDEH, 2019a). While this is one perspective, neighbourhood money that is currently spent in other boroughs and the city centre will be redirected locally. With this said, international retail chains and luxury brands rarely re-invest in communities: without proper taxing laws, locally spent money can leave the community as quickly as it was being spent in other districts.

City shopping centres are competing with the recent cultural shift to online shopping practices, a new luxury shopping centre will add a greater strain on chain retailers in the city (See Document C3). Independent retailers will be competing with chain stores in Royalmount, reducing the opportunities for new customers. Their customers will need incentives to keep shopping: better sustainable values, uniqueness, quality, more products, convenience and more.

In 2018, the CDEH held a public hearing for citizens to express their concerns about Royalmount: municipal town halls were equally used for citizens to express their concerns. The CDEH acknowledged that water network supply and demand will need to be reviewed in the sector by the agglomeration, and infrastructure investments should be anticipated. The city must act fast to integrate public and active forms of transportation in the area as a means to exploit TOD principles. Similarly, explicit policies to capture money should be implemented to fund this transition away from auto-centricity. This is expected to reduce the traffic burden (CDEH, 2019a). This development was not considered in economic development plans of the city. These provincially mandated documents will need to be updated with the Royalmount project (CDEH, 2019a). The financial services of the City of Montreal expect this billion-dollar investment to increase the city of Montreal's tax revenue by \$25.8 million and TMR's tax revenue by \$25.5 million (CDEH, 2019a). While the agglomeration is very invested in Royalmount, TMR elected

officials had the final say in approving or rejecting Phase 1 of the project: the mixed use shopping centre specifically. Recommendations by the *Commission sur le développement économique et urbain et l'habitation* (CDEH) acknowledge that no studies concerning sustainable development, environmental, social and public health impacts were requested (CDEH, 2019b).

While Royalmount is currently in construction, the hippodrome development will be conducted over the next 15+ years: this fact highlights a slower pace of development and room for policy iterations (Adenot, 2019). Unlike other projects in the study area (See Figure B1), this long-term development goal highlights important public investments and significant municipal involvement over the development of the hippodrome lot. Moreover, this allows room for careful feedback loops to be implemented during the development. The unsuccessful call for tender required 60% of built units on the lot to be affordable housing for the next 30 years: this first iteration was not well received by private developers but leaves room for careful consideration (Dubuc, 2023). As of May 2023, a working group was organized to concretize plans for the ecoquartier: the private investor Claridge and the Fond de solidarité FTQ are part of this group (Greig and Luft, 2023). These actors are expected to harmonize their goals for the lot and act as a feedback loop: considering past and emerging issues. The Chambre de commerce du Montréal Métropolitain has shared a document to the OCPM supporting the current development goals and pushing for the integration of innovative practices (See Appendix C2). While the site is near metro station Namur, policy-makers are aware that the area will need to be serviced by new modes of transportation, integrate active transportation networks and increase general connectivity to surrounding areas. The creation of new roads in the lots and services for housing (water, sewer, electricity) will be an additional cost to the project (See Document C1). It is undetermined if the city will directly pay for these or require private developers to build these and transfer the assets once construction is done.

Impacts and Indicators

These two development projects will have important repercussions on the city of Montreal. Royalmount displaces industrial activities on its site: replacing these sectors of employment with other sectors of employment: mainly service jobs and ‘white collar’ office jobs. The private investment stimulates the construction sector during its multi-phase

development. In both sites, densification in activities (residential or commercial) will result in bolstered tax revenues but also increase public service demands. With this said, possible indicators of impacts in the sites 'economic activities' include; job provision, population counts in the census area, tax revenues, construction activity, present sectors of employment, neighbouring business activities, traffic data, metro station passenger counts, bus passenger counts, local connectivity indices, surrounding land value increases, regional affordable housing deficits, city infrastructure investments, new service infrastructure costs, pressure on municipal services. Past densification projects such as Westbury and Le Triangle can give insight on the anticipated traffic trends and commuter mode shares to expect from future residents and shoppers (See Figure B1). The presence of a new shopping pole might severely impact neighbouring small businesses, however, clientele tends to be 'loyalty based': indicators such as business closures or monitoring business foot traffic will help indicate the impacts of these large projects.

Conclusion

In conclusion, both Royalmount and the hippodrome redevelopment project emerge from important opportunities that have been developing since the urbanization of the area. Historical land tenures are now open for redevelopment by public and private entrepreneurs. The agglomeration has taken important steps to consider the impacts of these projects on the quality of life in the area. Calls for tender at the hippodrome site have highlighted how city policies and objectives can be interwoven within the contracts. The role of for-profit and non-profit investors are being explored in the hippodrome site. Further, while sectors of employment and traffic impacts have been the main concern, other relevant economic impacts include tax revenues and additional service infrastructure provision. The long term implication of these projects should incentivise the city to monitor deficits closely as spending might be overlooked over the long period of investments. With this said, long periods of investments also enable the municipal authorities to catch provincial and federal programs over multiple terms. Roadway congestion threatens to slow economic activities, however, public transportation and networks of active transportations are 'low-hanging fruit' that can help balance the impacts of densification efforts. For both projects, the implications of housing and their affordability remains strenuous and vague. The impacts of these decisions can be anticipated with recent affordable and social

housing schemes in the city like Benny Farm, a recently celebrated social housing development project.

The Social and Cultural Environment

Dawn Wong

With urban evolution being carried out, projects like the Royalmount and Hippodrome developments mark a symbolic urban transformation for the city's growth. Both developments are anticipated to significantly influence the area through increased job opportunities, better infrastructure and attracting new investments. Despite the potential positive economic stimulation, the developments raised several concerns and critiques, for instance, gentrification, traffic congestion and urban heat island effects. It is vital to recognize the complex shifts of social and cultural environments as these changes are tied to communities, and new developments could both enhance and challenge the livelihoods of neighborhoods. This section will offer a thorough analysis of the social and cultural implications of both developments, with regard to demographics, community dynamics and social fabric, livelihoods and challenges and opportunities.

Combined Demographics Overview

Located at the corner of Highways 15 and 40, the Royalmount project is in the town of Mount Royal's industrial area. (Ville de Montreal, 2023) It covers 7.6 square kilometers. In 2016, there were 20,276 inhabitants, making up 1% of the entire population of the Montreal agglomeration. The City of Montreal has experienced a 4% population growth since the 2011 census. TMR is seeing a slight increase in population with denser conditions, in comparison to CDNNDG which has a slightly higher population growth rate and significantly denser population. For The Hippodrome site, it is located in the CDNNDG. The area is spread over an area of 21.4 square kilometers, ranking the highest population growth rate out of 19 districts. There were 166,520 inhabitants in 2016, representing 9.8% of the total population of the City of Montreal. (Ville de Montréal, 2018) The area depicts a heavily populated and bustling area. Both developments would likely cause an increase in population, whether it is through residential development or indirectly attracting more residents to reside in the area, leading to a rising rate in population density. There is an estimated number of 25 to 35 million visitors per year and

140000 trips per day after the completion of the Royalmount project (Ville de Montréal, 2019), therefore the development would likely contribute to an increase in population density in TMR. In terms of age composition, both areas record a higher proportion of children aged from 0 to 14 compared to the larger context of the City of Montreal. Despite that, TMR is characterized by a great population of seniors, whereas CDNNDG has a younger demographic trend, with a significant number of 25-34 age groups. (Ville de Montréal, 2018) The household composition for TMR and CDNNDG varies differently. For the Town of Mount Royal, the household pattern depicts traditional family units, marked by a notable proportion of two-person households with an increased number of families with children. In contrast, CDNNDG indicates a more diverse population, with a significant population in single-person households. With the age distribution patterns and household composition, it is needless to say these projects would potentially lead to a shift in age groups and change in household trends, especially for TMR, with a significant number of seniors. Both projects would likely attract certain age groups, such as families and professionals, since the developments include the construction of new residential units, along with amenities like a shopping mall, green space, and public space.

It is vital to take into account the immigrant population and linguistic characteristics as there is a significant amount of the population born in another country. For the language characteristics, There are nearly two-thirds of residents came directly or indirectly from immigration in TMR, however, CDNNDG marks a higher immigrant population, and the majority of people are from the Philippines, Iran, and China, reflecting a more diverse population compared to Mount Royal. (Ville de Montréal, 2018) Since both projects include the construction of new dwellings, for instance, there would be several 12500 new residential units in the Hippodrome, including 6000 units in the former horse race track. (Ville de Montréal, 2023). Therefore, it is expected that there would be socioeconomic changes, particularly in terms of possible higher-income groups. New housing units, commercial, and infrastructure would attract buyers with higher income, which could lead to a growth in average income in both TMR and CDNNDG. There would also be an increase in diversity in both areas, as people with different backgrounds would be enticed to live in the new housing, resulting in a more culturally diverse population.

Community Dynamics and Social fabric

Royalmount has various effects on the community's dynamics and social structure, bringing both positive and negative results. The possibility exists for a wealthier and more diverse population to be attracted to the area with the addition of luxury housing and premium shopping choices. Still, the increase in potential wealthier income groups creates worries about possible social division and the potential weakening of social connections between existing residents (Ville de Montréal, 2019). The presence of new residents from diverse backgrounds and higher financial status could disturb current social connections, possibly causing some groups in the community to feel excluded or marginalized.

As shown in (Figure B4), the image depicts the luxury retail complex currently undergoing construction in Phase 1. In June 2018, it was announced that luxury brands such as Louis Vuitton and Groupe Arnault, had partnered with Carbonleo on the project. (Patterson, 2020)

It is important to carefully consider community engagement and participation as essential elements during the development process. The existence of high-end retail stores raises concerns about inclusivity and accessibility, highlighting the importance of inclusive planning methods to make sure that all community members feel welcome and respected. Creating public areas and encouraging communication among residents are vital for fostering a cohesion and harmony between residents as it can reduce potential discord as well as enhance community unity. The project may worsen current inequalities in the community by altering housing choices and lifestyles. The local housing market may change with the addition of luxury accommodations and mixed-use developments, making it less accessible for some residents and impacting their lifestyle decisions. This change in population has the ability to transform the social makeup of the community, affecting its unity and incorporation.

Furthermore, the impact of the project on local businesses must not be underestimated. The addition of high-end retail choices could reduce the need for products sourced locally, creating obstacles for small enterprises and changing the neighborhood's identity. Finding a balance between the economic advantages of progress and the protection of indigenous businesses and community character is a significant obstacle for the Royalmount initiative. The issue of housing, especially with social housing, is a major concern in the community dynamics and social structure of the CDN neighborhood, aligning with Hippodrome

development. Community groups and housing organizations see the former racetrack site as a unique chance for development, they considered it the final opportunity to create a socially fair neighborhood. (OCPM, 2020) Therefore, the city's control of this land provides a special opportunity to tackle urgent housing needs and mold the social dynamic of the region.

Numerous stakeholders are worried about the lack of accessible, secure, and suitable housing choices currently available. It is because individuals have to allocate a great portion towards rent, often under their expected living conditions. As a result, social housing could serve as a solution in terms of addressing these challenges that are faced by lower-income families and also marginalized communities. It does not just offers long-term housing options, but also encourages a feeling of security and connectedness among residents.

Prioritizing families residing in Côte-des-Neiges for social housing units is viewed as a way to ease the strain on the neighborhood's rental market. Furthermore, there is a demand for a substantial rise in the amount of social housing units to be incorporated in upcoming neighborhood growth. Community organizations are pushing for a quota higher than the 20% outlined in the proposed By-law for a diverse city, stressing the increasing demand for high-quality and affordable housing. (OCPM, 2020)

The structure of housing influences neighborhood unity since it is affecting the community interactions and dynamics. Having access to housing that is both safe and affordable is beneficial for the well-being of residents while also promoting social integration. Oppositely, with a lack of stable housing and substandard living conditions, it can result in social division and increased disparities among community members.

Livelihoods

The Royalmount project has sparked important debates about how it may affect local communities, especially in the Montreal area. After a thorough public consultation, it was clear that there was a widespread agreement that the promoter must reconsider the project to guarantee its social approval. (Ville de Montréal, 2019) This emphasizes the significance of interacting with stakeholders and handling issues related to large urban development projects. Throughout the public consultation, the major impacts identified include governance, local transportation patterns, local and commercial activity redistribution. (Ville de Montréal, 2019)

Governance is a crucial element of community dynamics influenced by the Royalmount project. It is widely acknowledged that there is a need to reassess the governance structure for big business ventures, making sure that the decision-making process includes perspectives from the whole urban area. There are expressing worries regarding individual cities unilaterally approving projects without considering their wider regional effects. This highlights the importance of collaborative planning and a central role for the City of Montreal in tackling the diverse challenges presented by projects such as Royalmount.

Local transportation patterns are also a cause for concern, as stakeholders are worried about the potential effects on already congested local travel routes, specifically along the Décarie axis. (Ville de Montréal, 2019) The rise in vehicle traffic and the possibility of more severe congestion could make current transportation issues worse, which would impact the daily routines of people and businesses in nearby areas. Therefore, coming up with new ideas and taking pre-emptive actions will be necessary and recommended to lessen the expected effects on local transportation.

Moreover, the impact of the project on the equilibrium of local and urban commercial establishments has been a topic of debate. Experts in the retail and entertainment sectors have pointed out the possibility of existing businesses and cultural venues within the agglomeration competing with each other. The implementation of the Royalmount project as it stands now could result in a reshuffling of business operations, affecting the vibrancy of city centers and recreational neighborhoods.

The Hippodrome development emphasis on developing a holistic and welcoming living space that could greatly affect the local community's well-being in multiple ways. The project creates chances for residents to increase job opportunities that are closer to home by promoting mixed-use areas near employment and commercial centers. (OCPM, 2020) This helps to decrease travel times and costs, improving the balance between work and personal life and financial security for families in the area.

Moreover, affordable housing, such as social units, enables residents from various backgrounds to live in the area, at the same time promoting socio-economic diversity and unity. It is important to have different housing options in housing development projects, especially the one that meets the needs of families with kids. It is because it would help promote family-friendly living, while keeping families in the area.

Furthermore, by turning the Namur region into a lively center with urban amenities and convenient public transportation, not only does it improve the neighborhood's quality of life, but also boost local trade and economy, opening up possibilities for local companies and entrepreneurs to flourish. (OCPM, 2020) (See Figure B5). Hippodrome's focus on developing a livable, inclusive, and vibrant neighborhood could significantly improve the lives and welfare of the local community.

Challenges and opportunities

There are both challenges and opportunities for Royalmount, as the updated project has encountered several criticisms and obstacles while attempting to tackle issues highlighted by different stakeholders. According to a news article published by LeDevoir, although Carbonleo has made considerable changes to their original plan by adding a residential aspect and emphasizing sustainability, the lack of social housing continues to be a source of dispute. (Corriveau, 2020)

Despite noting some progress, Mayor Valérie Plante has criticized the project for its insufficient provision of social housing. She highlighted that the problem of car congestion still remains persistent regardless of the joint effort to reduce through public transportation and cycling infrastructure. The citizens, represented by organizations such as the Royalement ContreRoyalmount committee, continue to question the project's overarching effects. Furthermore, Pierre Avignon argued "The project is undoubtedly more acceptable, but the heart of the problem remains the shopping center and mobility around the project." (Corriveau, 2020) He argues that there is some progress that has been acknowledged, however, there is a widespread feeling that the project fails to sufficiently meet the needs and concerns of the larger community. Another criticism is made by Christian Savard from Vivre en ville, he condemned the project for being too focused on commercial aspects and not harmonizing well with the surrounding environment. (Corriveau, 2020) He also stressed the importance of giving more thought to how the project would affect current business districts and retail hubs.

The Hippodrome project in CDNNDG is facing significant challenges because of opposition from the community and complex bureaucratic procedures. The government officials does not have a unified strategy, which lead to greater concern among residents and stakeholders (Ceausu, 2023)

Individuals like Sharon Freedman and Michael Shafter, who are members of the community, have expressed their doubt and dissatisfaction about how the city has managed the development project. (Ceausu, 2023) Freedman emphasizes the lack of thorough planning and the need for agreement among all government levels before distributing large amounts of funds. Consequently, the lack of private sector participation in response to the city's request for proposals can be attributed to the absence of a well-defined vision for the overall plan.

Moreover, there is a noticeable feeling of importance regarding the approaching deadline for action on the Hippodrome lot, with the possibility of missing out on valuable opportunities due to administrative inaction. Residents are mostly dissatisfied because of the unmet promises, including increased in police patrols, long-term housing for the homeless, and access to affordable housing. (Ceausu, 2023)

Although Mayor Gracia Kasoki Katahwa has promised to continue working on enhancing the quality of life for residents, there are still doubts remaining on the success of the administration's programs. (Ceausu, 2023) It is because there is a notable difference in funding allocated for social housing renovations and what the community expects highlights the gap between what officials say and what actually happens.

Furthermore, the uncertainty surrounding the quantity of housing units renovated or built in recent years depicts larger accountability problems in local government. The uncertainty increases resident fears and calls for more openness and responsibility in decision-making procedures. From my own knowledge, there are obstacles encountered by the Hippodrome development in the CDNNDG borough, including community doubt, bureaucratic problems, and the demand for open and participatory planning procedures. Despite the challenges, by addressing these identified issues, it will definitely foster collaboration among municipal authorities, community stakeholders, and governmental agencies to cultivate trust, facilitate cooperation, and guarantee the implementation of sustainable and fair and positive urban development projects.

Conclusion

Overall, Royalmount and Hippodrome demonstrate as an example for significant urban transformation, while shaping social and cultural environments in the communities. Although these projects could improve community dynamics and livelihoods, there are challenges and

concerns such as affordability of housing, social inequality and so on. It is crucial to recognize the demographic shifts as well as the social changes within the communities. Furthermore, these projects greatly impacted the social and cultural well-being of local communities, through creating and transforming vibrant and sustainable environments. Moving forward, without a doubt, it is necessary for stakeholders to further address the concerns made by residents, to ensure a fair public involvement during the decision making process, with an aim for building the utopia which could be used as models for sustainable urban developments in the future.

Bio+Physical Environment

Name :Emma

Montreal is arguably one of the unique cities in Canada. This is due to our diverse landscape, and strong cultural identity. Nestled in between the St-Laurence and Des Prairies Rivers, the Island of Montreal faces many environmental challenges such as flooding, air and water pollution, urban heat islands and climate change to name a few. Additionally, the augmentation of traffic congestion over the years has had a significant impact on the biophysical environment and quality of life of residents, which in turn has contributed to the expansion of transit networks throughout the city and implementation of Transit Oriented Development (TOD) practices. As the city has grown throughout different development projects, so have our environmental issues. Recently, two sites within the city have piqued our interest that will have significant impacts on our local neighborhood, the Royalmount Project and the Hippodrome site. Intersected between the Town of Mount Royal (TMR) and Cote-des-Neiges-Notres-Dames-de-Grâces (CDN-NDG), as well as the Decarie Interchange, these projects pose significant impacts for not only residents, but on the biophysical environment of the area. Hence, this section will explore the biophysical environments and transit analysis of the Hippodrome site area, and ongoing Royalmount Project.

Background

Located on the periphery of the CDN-NDG neighborhood, the once iconic Montreal Hippodrome site is now up for major redevelopment. Historically, the Namur-De La Savane area was an active agricultural hub for the city, with many apple, strawberry and melon fields in use up until the 1930s. This contributed towards the flourishing of very rich soil, which is still mostly

uncontaminated today (OCMP, 2019,2020 & Dubuc, 2023). In 1907, the Blue Bonnets race track opened which then became a popular destination in the city. The area surrounding the Hippodrome took a turn during the 1950s and 60s, as most of the land surrounding it developed into industrial parks. This provoked an increase in truck use in the surrounding area due to transport and logistics of the factories surrounding, as well as its harmful pollutant effects on the environment (OCMP,2020). Furthermore, the connection of the Hwy 40-Decarie Interchange greatly affected the area as it posed a further barrier to the access of the tracks, as well as creating traffic congestion. After over a century of use, the track closed in the fall of 2009 due to a decline in popularity, and aging infrastructure that called for expensive interventions (OCMP, 2019,2020). The City of Montreal acquired the land back from the province in 2012, and have since made progress towards the proposed redevelopment of the land with the intent of increasing social housing in the area (OCMP, 2020).

In 2015, the commercial development and property management company Carbonleo announced the grand Royalmount project. Located southwest of the Hwy 40 and 15, this ‘multifunctional urban development’ project aims to rejuvenate a once isolated and industrial zone in TMR, via green infrastructure, mixed use development and an ensemble of attractions. The project will not only include a luxury mall, but office spaces, an aquarium, pedestrian walkway, amenities, restaurants, event spaces, residential units (pending approval) and more (Patterson, 2019). This is not the first megaproject that Carbonleo has in Montreal, as they are also the ones behind the south shore's Quartier Dix 30. Construction of the site began in 2019 with the demolition of old industrial buildings, just before the pandemic hit. As of March 2024, the structure is still under construction, and is estimated to cost over \$7 billion once completed (Patterson, 2019).

Traffic and Transport Implications

As seen in Figure B6, the Hippodrome site is located in between an industrial park, the Canadian Pacific Railway track/lots, and the residential Hampstead neighborhood to its back. The Royalmount project is not too far away, at the corner of the Decarie Interchange, in between Cote-de-Liesse Rd and Decarie Blvd. Notably, these projects reside next to the Hwy 40-Decarie Interchange, one of the busiest interchanges in the city as it carries traffic from the West Island, Laval and St-Laurent into the city. It is defined by both Highway 40 and Highway 15, including

their service roads. This is an important interchange as many residents use this route to enter the city, as well as commuters parking at Namur Metro to avoid parking downtown, ranking in over 360,000 users a day (Jonas & Rukavina, 2024). Within this corridor, there are also two metro stations, De la Savane located at the corner of Du Sorel and Decarie Blvd, and Namur located at the corner of Jean-Talon and Decarie Blvd, see Figure B7. Multiple bus lines coincide at the metros, to serve commuters and residents into the surrounding neighborhoods. In 2015, the Namur area was designated as a TOD area, which further increased investment into practices involving mixed use and high density. This ideology is integrated within the incoming projects that promote similar values through mixed use development, integrated mobility and green infrastructure (OCMP, 2019 & Carbonleo, 2024).

Figure B7 illustrates the concentrated overlap of transit modes in the area, which is often congested during peak traffic hours due the estimated 360,000 users per day that pass through this specific corridor (Jonas & Rukavina, 2024). An important factor on the implications of these projects are its impacts on traffic congestion and accessibility by transit. In particular, the question of the impact of the Royalmount project has been brought to light by multiple parties, as the lead developer of the project, Carbonleo, provided no traffic impact analysis, but estimated 70,000 users coming daily (Carbonleo, 2024). Due to the project's location, this was very much frowned upon by the public's eye as it was seemingly only accessible via car, furthering the auto-centricity of the area. In 2018, the *Commission sur le développement économique et urbain et l'habitation* (CDEH) conducted a public consultation and released a set of recommendations for the project. The recommendations outline multiple concerns relating to traffic congestion and lack of environmental impact analysis, despite advertising how its 'green' design will help offset its heat island effect (CDEH, 2019a). One of the most pertinent findings from their own traffic study was that this project would worsen evening traffic times by 20-30 minutes, including public transit (Magder, 2018 & CDEH, 2019 a&b). They suggested further investment into TOD practices such as creating connected bike paths and focusing on human scale interventions. TOD practices would also align with the surrounding areas that have in recent years been developing and enhancing the built environment, such as 'Westbury' and 'Le Triangle' (CDEH, 2019a).

Considering that the plans for Royalmount include a mix of amenities and attractions for different incomes and family relations, it is attracting a wide array of people. Since the CDEH's recommendations were released, Carbonleo has seemingly made an effort to better connect the

site for transit users and pedestrians. This includes the implementation of a connection to the city's bike path network, 100+ charging stations for electric vehicles, 500 bike parking spots and all amenities on site within a 15-min walk due to pedestrian oriented development (Carbonleo, 2024). Finally, the installation of a skybridge connecting to the De la Savane Metro was completed in March 2024, as seen in Figure B 8 & 9 (Jonas & Rukavina, 2024). This allows for a connection to the metro system, and attached bus terminals. Notably, no further traffic analysis or car related impacts/ interventions have been addressed by Carbonleo. Despite amendments to their initial plans after the results of public consultation, the plan still includes having over 7000 parking spots for vehicles, even though Carbonleo has stated that they expect the majority of users to use public transit (Boshra, 2020). These contradicting goals versus actions is another reason as to why this project has received much criticism from Montrealers and politicians (Carbonleo, 2024).

In terms of the Hippodrome site residential redevelopment, no solid plans have been released as of yet, as developers have only recently joined the project. However, following the OCMP consultation in 2019, collective mobility was listed as one of five main themes of intervention, with emphasis on ensuring equitable transit access and focus on the pedestrian experience (OCMP, 2019). Last May, Espace La Traversée announced it was one of the first developers to acquire a deal for some of the land. Although they are still in the design process, they have emphasized their support of an equitable and accessible neighborhood (Magder, 2023). The city has also expressed its efforts in supporting the revitalization of the mobility of this area, as they are in the early stages of development of an extension of Cavendish, to better serve the incoming residential developments to come (Magder, 2023).

Noise and Air Pollution

Although sometimes overlooked, noise pollution is a pertinent urban issue as it has direct effects on the health of the population. Chronic exposure to noise can lead to prolonged sleep disturbances, irritability and stress. As shown in Figure B 10, the Decarie Interchange is already one of the noisiest sectors on the island (Dale et al., 2015). This begs to question how the Royalmount project will contribute to noise pollution, and what interventions they are taking to combat these negative effects. Notably, the plans are to include concert venues. As of March 2024, Carbonleo has not detailed any tactics to combat its noise contribution, however residents

of a similar project, Quartier Dix 30, have publicly warned surrounding residents of Royalmount of their own experience living near such a mega project (Scott, 2019). Gaetan L'Heureux, resident of Brossard, highlighted the impacts such development projects have on its residents. The disturbances started during the construction phase, however have continued afterwards through increased traffic in the area of having over 3,000 cars pass daily on his residential street to reach the complex. Due to the project's success, it brought in more developers building condos, further worsening the situation to a never ending nightmare. L'Heureux and his neighbors have since launched a class action lawsuit against the city of Brossard due to the negative impacts it had on the community (Scott, 2019). This is worth mentioning, as Royalmount can have similar implications on its own community, and is a topic of concern as there is expected to be an increase in residential units in the near future. No further information on the impact of the Hippodrome site development can be commented on in terms of noise pollution, as no plans are currently released.

The Royalmount project will inevitably bring a significant influx of vehicular traffic and construction activities into the area. As a result, air pollution is likely to increase. This is due to the swelling of vehicles emitting carbon monoxide and nitrogen oxide, contributing to the degradation of air quality (Gouvernement du Canada, 2023 & Gouvernement du Canada, 2022). Congestion triggered by the increase of people, will also have an effect due to idle cars producing more emissions, compared to cars traveling at higher speeds. Air quality decline will not necessarily be attached to the project design itself, but of its implications on traffic. This is of concern as it was reported that traffic from autoroutes in this area have contributed to worsening air quality days in Montreal, specifically from the Air Quality Station 28 located in Mont-Royal. This is without the expected increase in traffic (Ville de Montreal, 2023a).

Notably, the CDN Community Development Council (CDCCDN) released a statement in 2019 denouncing the project for multiple negative impacts it would have on the community. A prominent point being made is how this project does not align with Sante Publique's Regional Action Plan of Montreal for 2016-2021. The statement specifically outlines how the Royalmount development goes against two listed goals; reduce the number of Montrealers living in disadvantaged areas exposed to at an average noise level that exceeds WHO recommendations (55db) and, reduce pollutant emissions and noise from road transport (Ville de Montreal, 2019 &

Gouvernement de Québec, 2017). Due to proximity of the location, the residents of the incoming Hippodrome residential development would also be impacted by these factors.

Soil & Waste

Waste management has been a rising topic of concern in Montreal, following the revelation of multiple scandals of waste dumping. With the influx of large development projects over the years, there has been less and less space for companies to dispose of contaminated and non contaminated waste. The Royalmount site had around 7,000 tons of contaminated soil from the previous industrial buildings on the site. The removal was equivalent to almost 200 truck trips. Impressively, Royalmount was the first private project to participate in ‘Traces Quebec’, a program recently introduced to enforce responsible waste disposal of contaminated materials and of construction debris. The program essentially tracks all trucks carrying contaminated debris, ensuring that developers are disposing of the material responsibly (Larouche, 2019 & GBI, 2020). The data and location of where the debris is actually being disposed of is not available to the public.

In terms of the Hippodrome site, the site was demolished by Demospec in 2018. Following the demolition, the site underwent minor decontamination as some portions of the field were not suitable for development (Demospec, n.d). For the future development, no solid plans have been put in motion however on the city’s project site page it states that it will have the presence of “green infrastructure and water management (such as swales, water gardens and or water squares.” (Ville de Montreal, 2023b).

Water

The Royalmount’s water management strategy is critical to its resilience, and has major impacts on the surrounding ecosystem and community well-being. A project of this size can face many challenges such as mitigating stormwater runoff, water efficiency, wastewater treatment and groundwater recharge, while not straining the area’s system and impacting the community. Royalmount has made bold claims on its project page, which describe “rainwater foresting, 86% reduction in rainwater flow discharged into municipal sewers, an amount equal to 120 residential swimming pools for every 20-minute rain shower.” (Carbonleo, 2024). To note, no studies, details or plans by Carbonleo to demonstrate this claim have been released. This is also of

concern, as they are essentially developing on top of an old field, which is inherently good for water retention. The development would thus in turn pose a stressor on sewer networks as the water retention opportunity is reduced (Talebi & Pitt, 2019). The main concern would be of potential flooding if sewer systems were to be overwhelmed in the case of rainstorms. Heading forward, Carbonleo will hopefully release more explicit details to support their claims.

Heat Island and Footprints

The Royalmount project's development holds the potential to significantly exacerbate the urban heat island effect, a phenomenon where urban areas experience higher temperatures compared to their surrounding rural areas (Suh, n.d). As this project progresses, it is important to recognize the implications that the heat islands will have on the local climate and public health. Currently, this area is experiencing increased heat island effects, as we can see in Figure B11. This is due to the area's concentrated traffic congestion, air pollutants and low albedo of the highway, road and surrounding buildings. To note, there is also a large presence of parking lots in the area contributing to these effects, such as the Namur Parking, large commercial spaces, like Walmart & Toys R Us nearby and lastly of the industrial park located between the Decarie Interchange and the Canadian Pacific Railway park. In recent years, we have seen the increased effects of heat islands on public health, such as a rise in hospitalization and mortality due to heat stroke related illnesses (Suh, n.d).

As per the project website, the development is allegedly "one of the only 100% carbon-neutral mixed-use developments in Canada. 93% through the energy loop, energy transfer station and hydroelectricity. 7% from carbon credits. Reduction in energy consumption by 25%, through an energy loop powered by hydroelectricity and leveraging the geothermal system. Celebrating nature through 450,000 CO₂ absorbing trees, shrubs, plants and perennials throughout the development, transforming one of the largest heat islands into a green, urban oasis" (Carbonleo, 2024). It will also include the incorporation of native plant species. Again, no formal report or studies to review these claims have been released. This leads to question if the claims will be true, and even if they offset the project's emissions, it will not help alleviate the effects of the surrounding parking lots and incoming traffic the project yields. Essentially, a study providing more context and details of the plans with scientific reason is

needed, as there are little details to the ratio of permeable and non permeable surfaces there will be.

In relation to the Hippodrome site, although there are no plans in motion, the OCMP's recommendations emphasize on the implementation of "a neighborhood with low ecological footprint, carbon neutral, innovative and rooted in the community." (OCMP, 2019). From the examples they provide in their presentation, urban ecology will be essential within the residential quarter's design. They also emphasize this project's contribution towards Montreal's ecological transition effort.

Conclusion

The ongoing Royalmount Project and incoming Hippodrome redevelopment represent significant urban transformations that will not only shape the area's landscape, but have direct impact on its residents and environment. More specifically, the location of the projects residing next to a major interchange is in question. The concentration of transit modes in these areas underscore the importance of addressing traffic congestion and promoting sustainable transportation options. The Royalmount project's efforts to integrate transit connections and pedestrian oriented infrastructure demonstrates an effort towards mitigating its impact on heat island effects and traffic congestion. However, concerns remain about its autocentric design and potential traffic disruption in terms of its secondary effects on residents. The main concern of the project's impact on the area is its contribution to heat island effects while attracting more cars and traffic to the area. Noise and air pollution are additional factors that must be attended to in order to address public health and well-being. Moreover, responsible and eco-friendly waste and water management have been addressed within the Royalmount design, however lack scientific studies to back these claims, as well as transparency with the public. In conclusion, the redevelopment of the Hippodrome and Royalmount Project offer opportunities for revitalization and economic growth, but attentive planning is necessary to address their environmental challenges. By prioritizing sustainability, these projects have the potential to positively impact Montreal's urban fabric and environment.

Final Reflection

Remarks on the Research

Both Royalmount and Hippodrome Redevelopment have been greatly slowed by the Pandemic, as the switch to remote work slowed many government processes. The OCMP has been present in both projects, offering a platform for citizens to complain. TMR's and the city of Montreal's government officials are following the orientations shared during the election period. While the first phase of Royalmount is nearing completion, the Hippodrome remains undeveloped well into the first term of 2024. Government involvement and delays have resulted in an abundance of reports and statements. Moreover, the innovations woven into both projects have resulted in more research and more questions concerning the legitimacy of the development projects.

Monitoring is expected to be conducted through qualitative and quantitative data. Canadian census data will remain an important source of cross sectional data, allowing for longitudinal perspectives. Traffic data will also become crucial if residential nodes are developed in this area. Moreover industrial job displacement should be tracked closely as unemployment figures don't account for career shifts and capacity building.

Monitoring change in demographics

In terms of demographics, monitoring will be needed in order to survey the changing needs of the population, and identify future socio-economic disparities that these projects, more specifically the Royalmount Project, will inflict. CDN NDG is made up of a more diverse population in terms of ethnicity, households and income, while TMR presents more single-family homes and a wealthier population. Due to the commercial and housing context that these projects are providing, it is calling to attract a wealthier and younger population to the area. This is of concern, as the CDN NDG area is made up of an older population, whose housing needs are also different from younger families who need larger spaces. The luxury retail, amenities and future residential units that the Royalmount project offers will inherently have negative impacts on the area as it will attract younger and wealthier populations, whose needs are contradicting that of the current population. The Royalmount project is unfortunately not the best fit for the current population, as it does not reflect a development project that will enhance their quality of life, but

on the contrary, complicates it as it does not attend to their current needs. This will also impact surrounding land prices around the development, as these projects reflect signs of early gentrification. Monitoring will be needed in order to follow up with the changing socio-economic disparities, in order to prevent current residents from being pushed out of the neighborhood.

Monitoring sustainability

For the hippodrome project, the long term development goal will certainly outlast the ever changing definition of sustainability. The design of the site will ultimately need to react to the changing climate and ecological needs of the city. Moreover, the agglomeration will need to reconsider the economic impacts of Royalmount, ensuring that other businesses have the tools and policies to remain competitive and relevant. Business closures will need to be monitored and grossly avoided instead of simply mitigated. Commercial space lease prices will be important as they might be inflated by the development of a new midtown. Monitoring this would help indicate if interventions are needed on a policy level to avoid local business closures. The multiphase approach will give important opportunities to improve later phases. Municipal bodies are expected to explicitly state and leave time for feedback loops and analysis between phases. With the first phase of Royalmount opening and the first calls for tender completed (hippodrome), social, economic and physical considerations should be reviewed to reconcile following interventions.

Monitoring traffic

Moreover, due to the projects' location and complexity of transit systems and traffic congestion, close monitoring is needed to ensure mobility and have insight into environmental impacts the project implies. In this case, due to the location near Montreal's busiest highway interchange, traffic analysis will also be related to the environmental issues brought on by heat island effects. Future traffic impact analysis and community feedback will be integral to sustaining a cohesive transit network around the area of study. Monéo Associates recommend the implementation of long term monitoring to further reinforce the project's impacts positively on the environment, and for the well-being of the community.

Comments on Montreal 2030

In 2020, the city of Montreal published an *avant-gardiste* 10-year plan for the city of Montreal's development. As expressed in the introduction of *Montréal 2030: Citywide Strategic Plan*, the Covid-19 Pandemic reminded the city of its role in community and project risk management (Ville de Montréal, 2020). The document highlights systematic issues in their ways of functioning and directions to better their urban initiatives. The four key orientations are viewed through various scales, leading to 20 priorities (See Table B3). Both projects address important priorities and omit others. Royamount and the hippodrome are both expected to stimulate innovation and creativity. They bolster new planning practices and have the intention to adopt some sustainable practices like water retention technologies and carbon neutrality. These innovations attempt to contribute to the ecological transition. While they aren't contributing to the transition of existing buildings, they are attempting to construct new buildings with ecological mindfulness. We may argue that Royamount emphasis on indoor planting will not contribute to climate change happening outside the building. However, energy-saving technologies will be an improvement from old industrial buildings previously on the site. Later, both projects are also presented as a means to provide a quality living environment, increase attractiveness, prosperity and the city's profile. Montreal will be the latest host of a public aquarium, gaining Canada-wide recognition. Royamount's role as a privately funded luxury shopping centre warrants that the structures will be exclusive spaces that do not reinforce solidarity, equity and inclusion principles. The hippodrome, as a centre for affordable housing developments has the opportunity to bolster equity and solidarity in the city. Creating links and paths between the hippodrome and surrounding districts will help include the residents in the city, giving them access to interact with support services. Public participation will always remain a point of tension, as large investments become points of political jealousy. People have a right to comment and argue for better urban designs. Decades of debates are expected to proliferate in a city shifting away from car centrality. None of the projects acknowledge traditional indigenous values, instead following colonial western academia. No indigenous communities have been consulted in the development of these projects. Montréal 2030 priorities that are currently omitted from the designs have the perfect opportunity to be reconsidered between the phases of development of the two large projects. The mistakes of the first phases do not need to be repeated.

References

- Adenot, J. F. (2019). *Rapport du groupe de travail Namur-De la Savane*. Ville de Montréal et Ministère des Transports. [PDF] Retrieved from:
https://www.transports.gouv.qc.ca/fr/ministere/acces-information-renseignements-personnels/documents-reglement-diffusion/etudes-rapports/etudes-recherches-transport/Documents/etude_namur.pdf
- Agence QMI, (2023, May 18). Espace La Traversée obtient le premier projet de logements. *Le Journal de Montréal*. URL:
<https://www.journaldemontreal.com/2023/05/18/ancien-hippodrome-losbl-espace-la-traverse-obtient-le-premier-projet-de-logements>
- Boshra, B. (2020, February 27). Developer presents revamped plans for controversial Royalmount Megamall Project. Montreal.
<https://montreal.ctvnews.ca/developer-presents-revamped-plans-for-controversial-royalmount-megamall-project-1.4827103?cache=yes>
- Carbonleo (2015, May 20). Innovative urban development project designed for active and social shopping experiences: Carbonleo proudly unveils Royalmount project. *News Wire*. Cision. URL:
<https://www.newswire.ca/news-releases/innovative-urban-development-project-designed-for-active-and-social-shopping-experiences---carbonleo-proudly-unveils-royalmount-project-517731221.html>
- Carbonleo (2018a, November 27). *Royalmount: Nourrir le cœur et l'esprit*. In Présentation du promoteur. [PowerPoint] Ville de Montréal. Retrieved from:
https://ville.montreal.qc.ca/portal/page?_pageid=6877,143152311&_dad=portal&_schema=PORTAL
- Carbonleo (2018b, October 25). Royalmount project is underway: Gearing up for construction, slated to begin spring 2019. *News Wire*. Cision. URL:
<https://www.newswire.ca/news-releases/royalmount-project-is-underway---gearing-up-for-construction-slated-to-begin-spring-2019-698519242.html>

- Carbonleo. (2024, February 28). *Royalmount Project*. Carbonleo.
<https://www.carbonleo.com/project-royalmount/?lang=en>
- CBC news (2016). *Montreal building ages*. Carto [Open Data GIS Map Online] URL:
https://cbcnews.carto.com/viz/a0ff3d1e-c3cb-11e6-a04f-0ecd1babdde5/public_map
- CDEH (2019a, February 25). *Rapport d'études et recommandations: Les impacts du projet Royalmount*. Commissions permanentes Ville de Montréal. Retrieved from:
https://ville.montreal.qc.ca/portal/page?_pageid=6877,143152311&_dad=portal&_schema=PORTAL
- CDEH (2019b, January 24). *Les impacts du projet Royalmount: Recommandations*. Commissions permanentes Ville de Montréal. Retrieved from:
https://ville.montreal.qc.ca/portal/page?_pageid=6877,143152311&_dad=portal&_schema=PORTAL
- Ceausu, J. (2023, February 15). “give it all Back!”:residents push CDN/NDG on Hippodrome | City News | thesuburban.com.
https://www.thesuburban.com/news/city_news/give-it-all-back-residents-push-cdn-ndg-on-hippodrome/article_f38b6c9d-e70d-5f3d-94d0-16f05f0ff532.html
- Corriveau, J. (2020, February 26). *Royalmount: Revu et corrigé, mais toujours aussi controversé*. Le Devoir.
https://www.ledevoir-com.translate.goog/politique/montreal/573672/le-projet-royalmount-revu-et-corrige?_x_tr_sl=fr&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc
- Dale, L.M., Goudreau, S., Perron, S., Ragettli, M. S., Hatzopoulou, M., & Smargiassi, A. (2015). Socioeconomic status and environmental noise exposure in Montreal, Canada. *BMC Public Health*, 15, 205. doi:10.1186/s12889-015-1571-2
- DemoSpec. (n.d.). *Hippodrome de Montréal*. demospecgroupe.
<https://demospec.ca/projets/blue-bonnets-hippodrome-de-montreal/>
- Dubuc, A. (2023, January 31). Faux départ à l'hippodrome. *La Presse. Marché immobilier*. URL:
<https://www.lapresse.ca/affaires/marche-immobilier/2023-01-31/faux-depart-a-l-hippodrome.php>
- GBI. (2020). *Royalmount*. Achievements. <https://www.gbi.ca/en/projects/royalmount>

- Gouvernement du Canada. (2022, March 31). *Government of Canada*. Health.
<https://www.canada.ca/en/health-canada/services/publications/healthy-living/infographic-does-traffic-take-your-breath-away.html>
- Gouvernement du Canada. (2023, June 14). *Traffic and air quality: Driving change through research*. Science.
<https://science.gc.ca/site/science/en/blogs/science-health/traffic-and-air-quality-driving-change-through-research>
- Gouvernement Quebec. (2017, March). *Plan d'action régional intégré de santé publique de Montréal — Offre de services détaillée*. Sante Montreal.
<https://ciusss-centresudmtl.gouv.qc.ca/sante-montreal>
- Greig, K. and Luft, A. (2023). Montreal creates working group to push forward on plans for Hippodrome Site. *CTV News*. URL:
<https://montreal.ctvnews.ca/montreal-creates-working-group-to-push-forward-on-plans-for-hippodrome-site-1.6417963>
- Jonas, S., & Rukavina, S. (2024, March 26). *Royalmount mega-mall project a step closer to completion, but traffic concerns remain* | *CBC News*. CBCnews.
<https://www.cbc.ca/news/canada/montreal/royalmount-construction-progress-check-in-1.7155635>
- Larouche, V. (2019, September 29). *Sols contaminés: Une application pour empêcher Les déversements Illégaux*. La Presse. Environnement.
<https://www.lapresse.ca/actualites/environnement/2019-09-29/sols-contamines-une-application-pour-empêcher-les-deversements-illegaux>
- Magder, J. (2018, November). *Royalmount project would worsen evening commute, City Document reveals* | *montreal gazette*. Local News.
<https://montrealgazette.com/news/local-news/royalmount-project-would-worsen-evening-commute-city-document-reveals>
- Magder, J. (2023, May). *Montreal names First Housing Developer for hippodrome neighbourhood* | *montreal gazette*. News/Local News.

<https://montrealgazette.com/news/local-news/city-awards-first-housing-developer-for-hippodrome-neighbourhood>

- OCPM. (2019) *Quartier Namur-Hippodrome: Document d'information*. [PDF]. URL: https://ocpm.qc.ca/sites/default/files/pdf/P107/3-1_document_dinformation_quartier_namur-hippodrome_final_1.pdf
- OCPM. (2020). *Quartier Namur-Hippodrome: Rapport de consultation publique*. [PDF] URL: <https://ocpm.qc.ca/sites/default/files/pdf/rapports/rapport-namur-hippodrome.pdf>
- Patterson, C. (2019, June20). *Innovative Royalmount Development Breaks Ground in Montreal*. Retail Insider. <https://retail-insider.com/retail-insider/2019/06/innovative-royalmount-development-breaks-ground-in-montreal/>
- Patterson, C. (2023, June 14). *Royalmount in Montreal announces more retail tenants ahead of Summer 2024 opening: Interview with carbonleo CEO Andrew Lutfy [exclusive]*. Retail Insider. <https://retail-insider.com/retail-insider/2023/06/royalmount-in-montreal-announces-more-retail-tenants-ahead-of-summer-2024-opening-interview-with-carbonleo-ceo-andrew-lutfy-exclusive/>
- Scott, M. (2019, February). *Dix30 neighbour warns Royalmount Project could bring noise and traffic | montreal gazette*. Local News/ Local Business. <https://montrealgazette.com/news/local-news/dix-30-neighbour-warns-of-years-of-hell-from-royalmount-project>
- Suh, C. (n.d.). *The urban heat island effect in Montréal*. Data Driven Envirolab. <https://datadrivenlab.org/the-urban-heat-island-effect-in-montreal/>
- Talebi, L., & Pitt, R. (2019). Water sensitive urban design approaches in sewer system overflow management. *Approaches to Water Sensitive Urban Design*, 139–161. <https://doi.org/10.1016/b978-0-12-812843-5.00007-1>

- Town of Mount Royal. (2024a). *Land use grids*. pp.273-275. [PDF] Retrieved:
https://www.ville.mont-royal.qc.ca/storage/app/media/ma-ville/vie-democratique/reglements-municipaux/1441_grilles_24octobre2023_fr.pdf
- Town of Mount Royal. (2024b). *Major projects: Royalmount project*. URL:
<https://www.ville.mont-royal.qc.ca/en/my-town/living-in-tmr/major-projects>
- Town of Mount Royal (2024c). *Plan générale: zonage*. [PDF] Retrieved:
https://www.ville.mont-royal.qc.ca/storage/app/media/ma-ville/vie-democratique/reglements-municipaux/1441_plan_fr.pdf
- Ville de Montréal. (1975). *ETCO 223-33*. In *Utilisation du sol, Montréal, échelle 1:2 400*. Service de l'habitation et de l'urbanisme. Retrieved from BANQ:
<https://collections.banq.qc.ca/ark:/52327/2436797>
- Ville de Montréal. (2018, May) *PROFIL SOCIODÉMOGRAPHIQUE Recensement 2016. Arrondissement de Côte-des-Neiges– Notre-Dame-de-Grâce*. [PDF]. URL:
https://ville.montreal.qc.ca/pls/portal/docs/PAGE/MTL_STATS_FR/MEDIA/DOCUMENTS/PROFIL_SOCIOD%C9MO_CDN-NDG%202016.PDF
- Ville de Montréal. (2018, November 13). *Dossier de consultation: Impacts du projet Royalmount*. Commission sur le développement économique et urbain et l'habitation. [PowerPoint] retrieved from:
https://ville.montreal.qc.ca/portal/page?_pageid=6877,143152311&_dad=portal&_schema=PORTAL
- Ville de Montreal. (2019, January). *Royalmount : Un projet fort préoccupant pour les organismes communautaires de Côte-des-Neiges*. Montreal.
http://ville.montreal.qc.ca/pls/portal/docs/PAGE/COMMISSIONS_PERM_V2_FR/MEDIA/DOCUMENTS/MEM_CDN-NDG_20190116.PDF
- Ville de Montréal. (2019, February, 25). *Dossier de consultation: Impacts du projet Royalmount. Les impacts du projet Royalmount*
https://ville.montreal.qc.ca/pls/portal/docs/PAGE/COMMISSIONS_PERM_V2_FR/MEDIA/DOCUMENTS/RAPPORT_ROYALMOUNT_20190225.PDF

Ville de Montréal. (2020). Montréal 2030: Citywide Strategic Plan. [PDF]. URL:

<https://montreal.ca/en/articles/montreal-2030-first-strategic-plan-8318>

Ville De Montreal. (2023a). *Environmental Assessment Report 2022 Air Quality In Montréal*.

Montréal. https://portail-m4s.s3.montreal.ca/pdf/bilan_qualite_air_2022_en_final_v2.pdf

Ville de Montréal. (2023b, February). *Namur-hippodrome district: An ecological neighbourhood*.
Projects.

<https://montreal.ca/en/articles/namur-hippodrome-district-ecological-neighbourhood-341>

[60](#)

Appendix A

Map of target Area

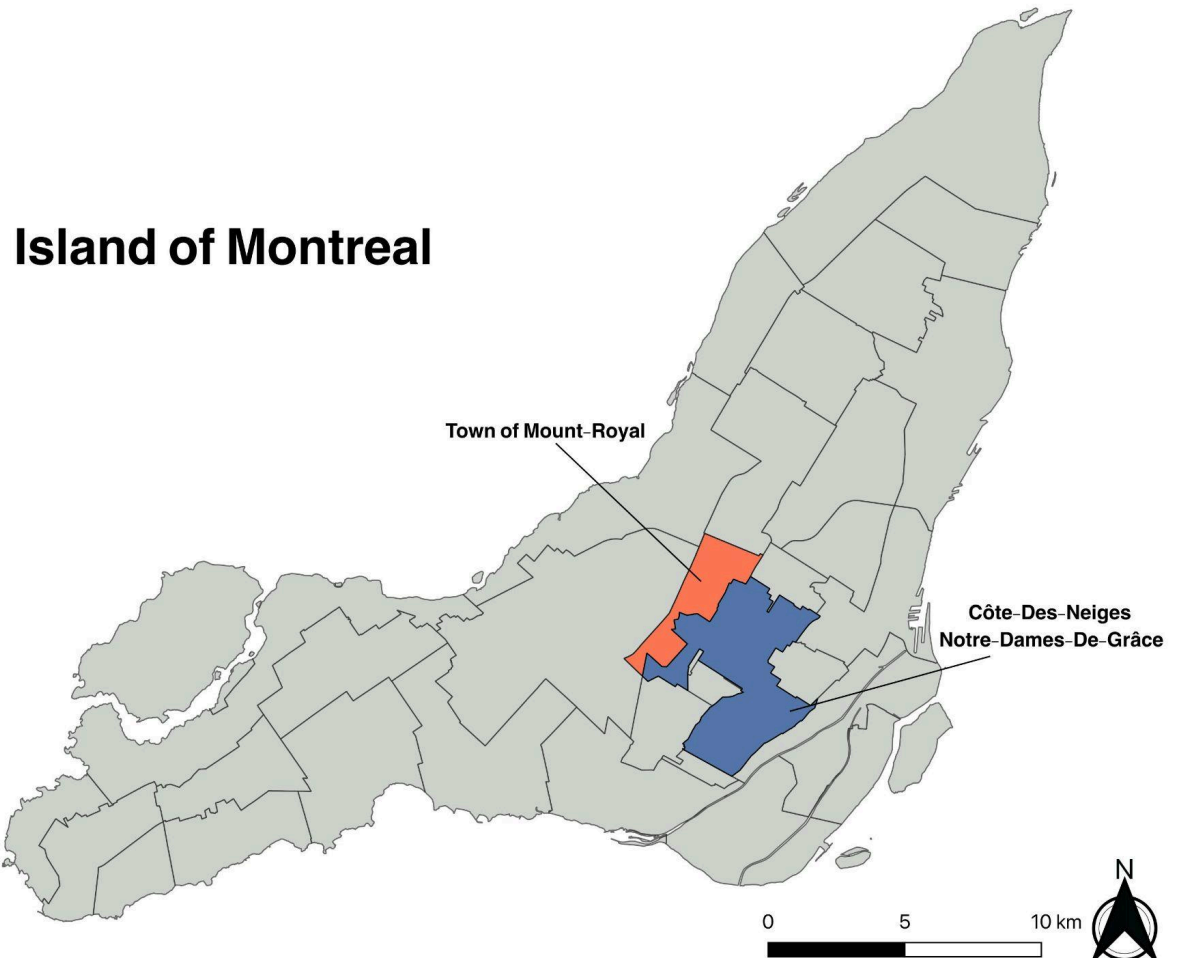


Figure A1: Map of Agglomeration of Montreal with municipal and borough boundaries. TMR (Orange) and CDNNDG (Blue) highlighted (Authors, 2024).



Figure A2: Map of Study area containing both project sites (Authors, 2024).

Appendix B

Supporting Graphics

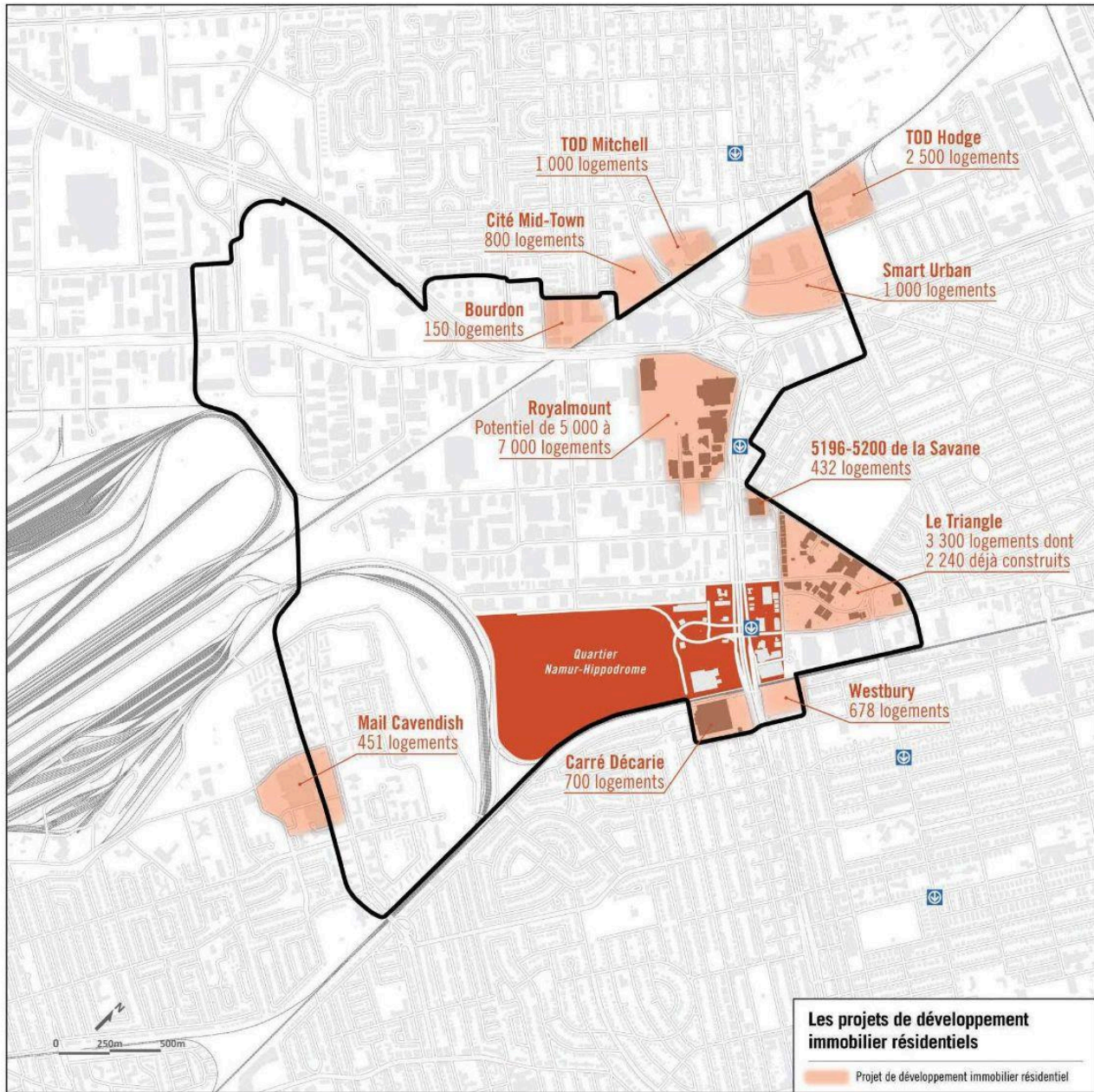


Figure B1: Residential densification projects around Station Namur and De la Savane (OCPM, 2019, p. 49). Original orientation of the map has been maintained for the purpose of readability.

Accelerating ecological transition	Reinforcing solidarity, equity and inclusion	Amplifying democracy and participation	Stimulating innovation and creativity	Outside the 4 Aims
Reduce GHG emissions	Increase access to affordable food	Increase citizen participation	Support innovation	Provide a quality living environment
Nurture Nature in the city	Healthy, adequate and affordable housing provision	Simplified smooth and accessible experience	Support cultural vitality	Increase attractiveness, prosperity and profile
Sustainable and affordable mobility	Combat racism and discrimination in administration	Leverage transparency and data availability	Foster the city as a living laboratory	
Greener and inclusive economy	Strengthen social safety net	Continue reconciliation with indigenous peoples	Permit cultural innovation	
Advance towards a zero-waste economy				

Table B3: Montreal 2030 aims (Red Row) and 20 summarized priorities (Ville de Montréal, 2020).

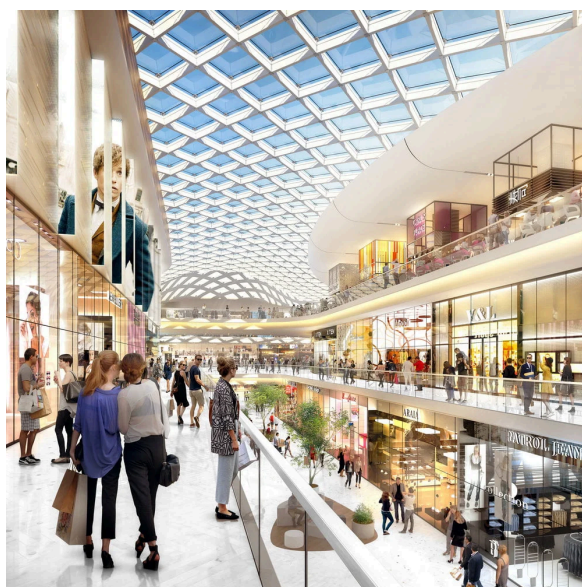


Figure B4: Patterson, C. (2020). *Innovative Royalmount Development Breaks Ground in Montreal*. [Photograph].



Figure B5: OCPM. (2020, September 17). *Quartier Namur-Hippodrome*. [Photograph].



Figure B6: Map of study sites framed by significant Highways (Authors, 2024)



Figure B7: Map of study area with transit layers (Authors, 2024)

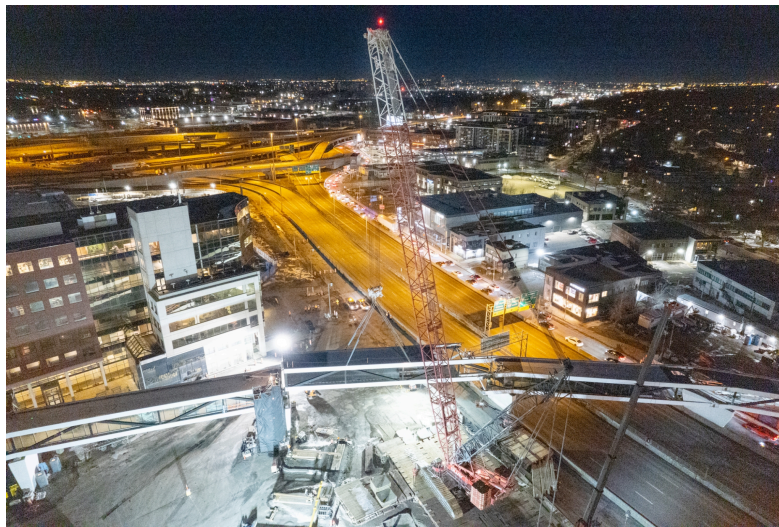


Figure B 8: Skybridge being installed at night in March of 2024 (Carbonleo, 2024)



Figure B 9: Picture of pedestrian tunnel from service road (Author, 2024)

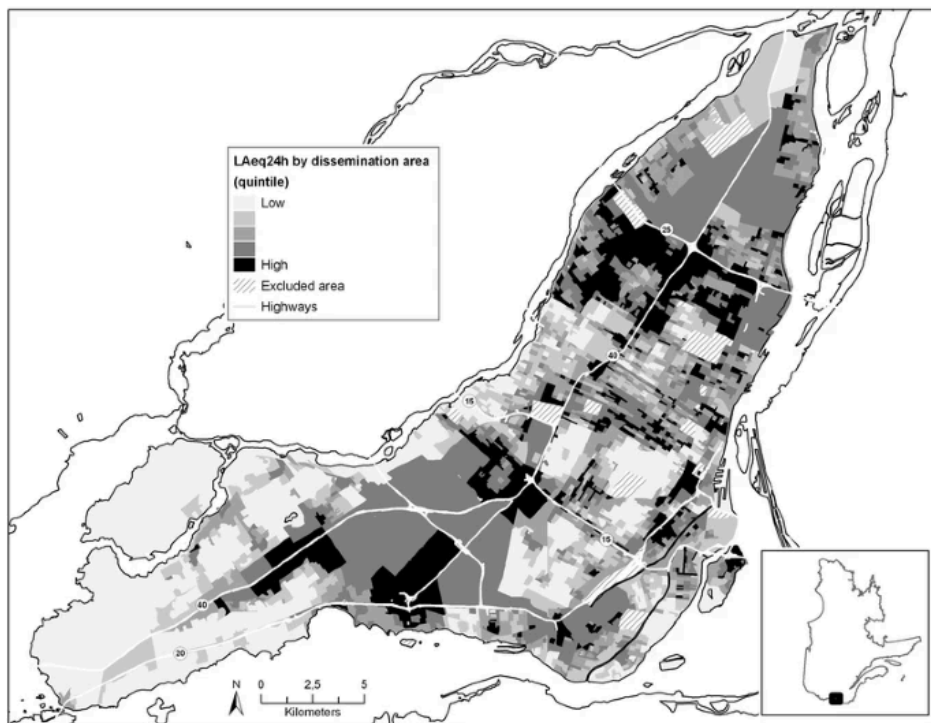


Figure B 10: Map of noise levels in Montréal (Dale et al., 2015)

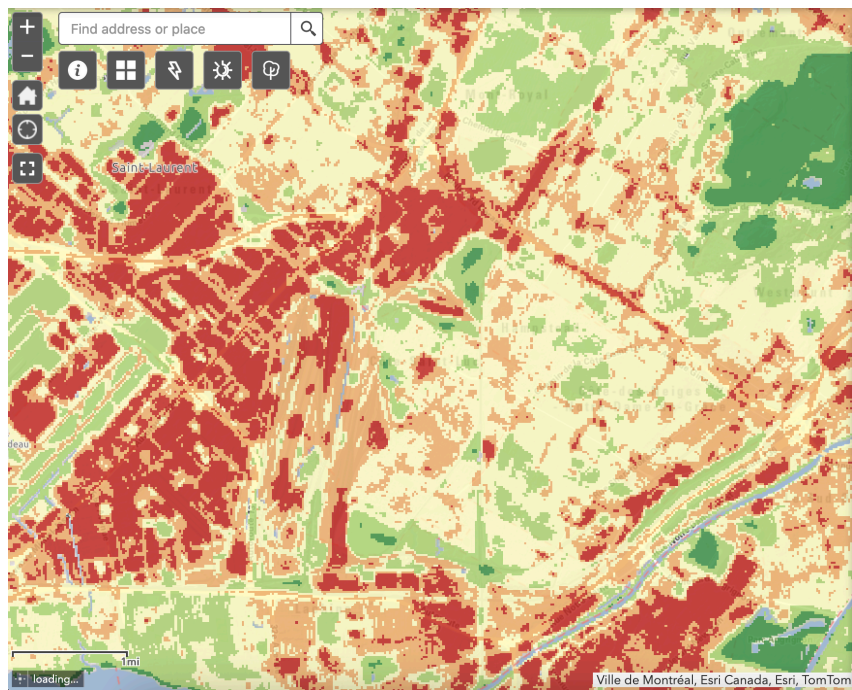
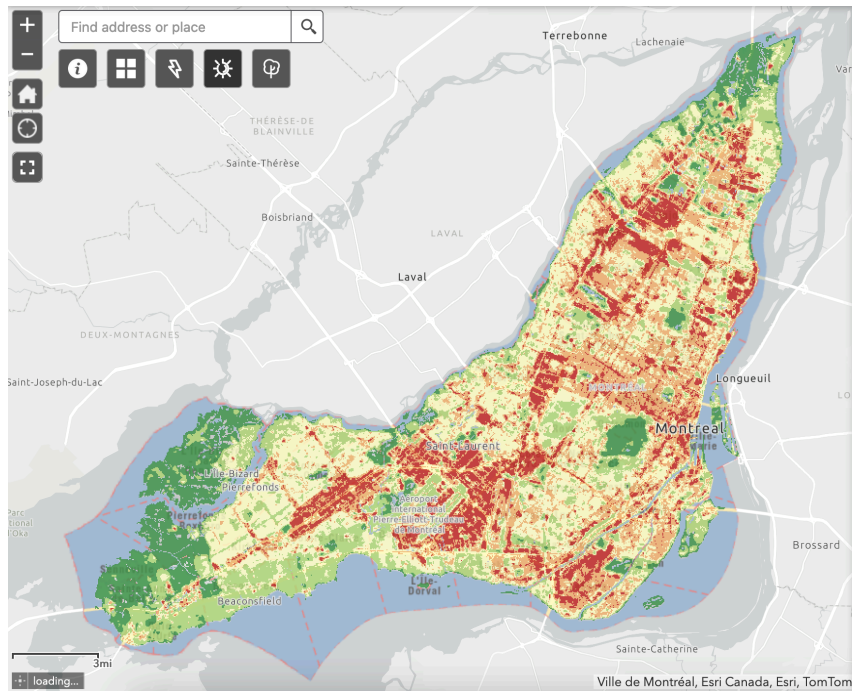
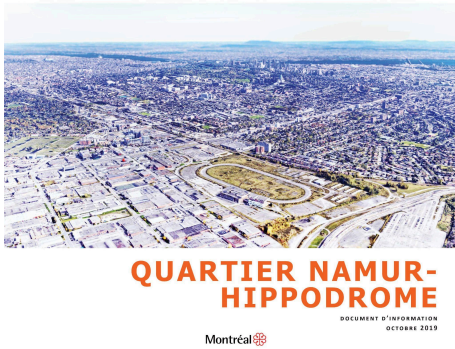


Figure B 11: Map of heat islands of Montreal. Second image zoomed in view of study region (Ville de Montreal, 2018)

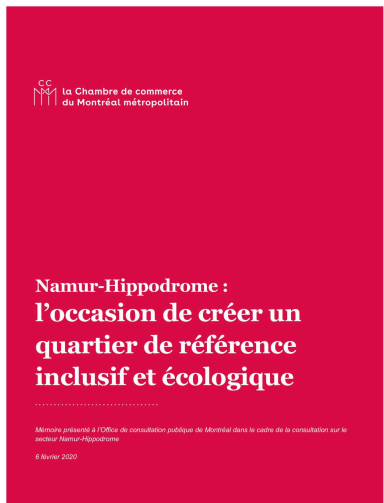
Appendix C

Supporting Documents



This thorough OCPM analysis outlines development intentions for the hippodrome site. Other than the information that was referenced for the purpose of this analysis, reference projects are generously presented.

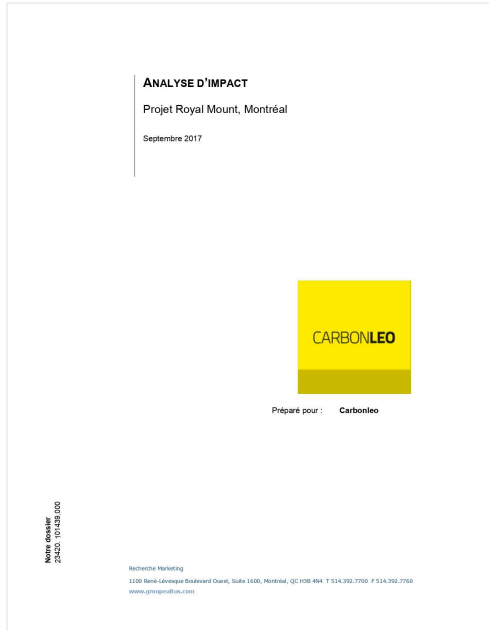
Document C1



Recommendations written by the Chambre de Commerce de Montréal Métropolitain (CCMM) about investments and development projects happening in the site area:

All 6 recommendations support the development of high density and innovative planning devices

Document C2



Document C3

Royalmount economic impact assessment conducted by GroupeAltus for Carbonleo.

Chain retailers are counted and economic retail poles are highlighted. The article is focused on examining how many residents of the region buy goods outside their neighborhood.

Royalmount is perceived as a means to capture sales that would otherwise be spent outside the study zone (Downtown).

