

Getting from here to there

Fostering pathways to low-carbon, urban sustainability



The Manchester Project Workshop Report

Held May 15, 2013, University of Calgary Downtown Campus

This workshop report is being distributed to our existing email database including, workshop attendees, those who were invited but did not attend and new potential stakeholders identified since. This leaves out potentially interested individuals and organizations who would be interested if they knew about the project, so please share this document widely. For more information contact data is on the inside rear cover.

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Low-carbon life and cities: A message from the organizers

There is a strong relationship between a city's urban form and the amount of carbon emitted in the course of daily life. Research conclusively shows cities that are denser, more compact and which favour walking, biking and public transit as the dominant transportation modes create significantly fewer emissions than do suburbanized, auto-dependent places. In the face of looming environmental and social tipping points the ways in which cities are developed and redeveloped urgently requires new strategies to permit a successful transition to a low-carbon world. The Manchester Project is part of a research initiative investigating how emission reductions may be achieved by creating and following urban planning strategies that respond to and provide for the sustainability of human habitat in a carbon-constrained future.

The interesting, and novel, aspect of our work is that because much is already known about the kind of places future cities will need to be (to meet the sustainability challenge), it is not the destination we are focused on as much as the journey. Change is necessary and we know (roughly) where we're headed. The pressing question is: which mechanisms and processes must be in place so that a desirable future can emerge? Accordingly the subtitle of the Manchester Project workshop "Getting from here to there – Fostering pathways to low-carbon, urban sustainability" reflects both the subject of our research and the active intention to initiate a discussion asking how to make it happen. In this light we intended the workshop not only as a forum to conduct useful research but as a jumping-off point for achieving carbon emission reductions that in the process also create vibrant, prosperous, inclusive and livable urban spaces.

The report satisfies the twin purposes of our research. By identifying, ranking and interpreting the records of the workshop into a coherent framework we form a catalogue of "barriers" that can be broadly generalized and widely disseminated. And, by focusing specifically on Manchester, we can take the generalized knowledge we have discovered and apply what we have learned to the local context.



Acknowledgements

This workshop would not have been possible without the contributions and hard work from many people. First we would like to thank Institute for Sustainable Energy, Environment & Economy and interim director Brian Keay which sponsored the event and provided the resources to make it possible. Special thanks to the ISEEE staff – Mark Lowey, Melody Harris and Svetlana Vakanjac – for their role in coordinating the event and facilitating the logistics for the registration, the food and the venue.

Due also are thanks to the graduate students from ISEEE and Environmental Design who volunteered to monitor and record our working sessions: Rob Birch, Aida Nciri, Corinne Keough, Liam Cummings, Kerry Ross and Ana Karinna Hidalgo. Thanks and kudos to the group of Urban Studies students who researched and produced the very entertaining and informative Manchester video presented during the morning session: Ben Herrel, Paul Needham, Corinne Keough and Hayden O’Connor. We’d also like to thank local historian Harry Sanders who provided direction for the historical research.

Thanks to Thom Mahler of Calgary Land Use and Planning who provided us with several of the map products that were on display during the working sessions.

If the workshop was a success, much of the credit is due to the tone set by our keynote speakers, Senator Ron Ghitter, and urban planner Brent Toderian.

Thank you to France Goulet and Barry Phipps from the office of the Vice President of Research, who provided valuable guidance and support to help make the Manchester workshop possible.

Finally, thanks the participants, many who took time from extremely busy schedules to participate in the workshop. We realize and appreciate the value of your time and effort.

Sincerely,

Geoff Ghitter

Noel Keough

About this report

The report has three parts. The first provides the context and background of the project including descriptions of the genesis and evolution of the Manchester concept and a briefing on the goals of our research and the development of the workshop concept. Also in this section is a short description of the study area. The second part deals with our goals for the workshop itself. Here we discuss the intentions for the day and provide an explanation for the structures we have chosen to frame the goals of the participatory work. A brief assessment of the success of each workshop element is considered. The third part focuses on the outcome of the workshop by offering an annotated list of barriers identified as well as specific scenarios that could respond to and overcome the barriers. Finally a set of actions to move the Manchester Project to the next stage is recommended.

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Part 1: Background and Context

Genesis of the Manchester Project

For those who pay attention to urban form and function a ride on the C-Train south from 39th Avenue Station to Chinook Station sparks a subtle realization: the low-intensity character of land uses along the line, only three to five kilometres from downtown, is out of place. Economic theory tells us that land nearest the core and closest to transit should be the most valuable and subject to the most intense development. Yet, still found in the heart of the city is a low-intensity industrial district built out more than sixty years ago which retains land use patterns better suited

mix” of residential, commercial and industrial land uses, in proximity to each other, will be essential to the success of cities in a carbon-constrained world. As scholars interested in sustainable urban development Manchester presents a rare opportunity to be a seedbed of urban innovation.

Early Manchester research was undertaken as class projects by University of Calgary graduate and undergraduate students in planning, design, architecture, urban studies and environmental science. From these explorations, which began in 2008 and still



for the urban fringe of the 1950s than for the inner city of today. This contradiction challenges current economic understandings of urban growth and development.

But there is another reason to be interested in Manchester. Afoot In cities worldwide is a strong and growing movement dedicated to rethinking how derelict or under-used industrial lands can be sustainably reintegrated into the urban landscape. Unlike recent redevelopment models which do not typically plan for the retention of industrial employment as a district gentrifies, new thinking suggests that a “triple

continue, the basic outlines of a vision for the district was developed as various social, environmental and practical aspects of a transformation in Manchester were investigated. From this effort emerged a solid body of research and design work giving substance to the theory and acting as a baseline for subsequent work. This workshop and our parallel research, which compares Manchester to other industrial redevelopment projects around the world, starts the next phase of bringing to life, what we now call “The Manchester Project”.

Our research and the workshop concept

In May 2012, the Institute for Sustainable Energy, Energy & Economy (ISEEE) awarded a Post-doctoral fellowship to Geoff Ghitler (Supervisor Noel Keough) to work on the broad concept of “low-carbon communities”. Building on the baseline established previously our research proposal centred on a “demand” side approach for reducing urban carbon emissions by managing energy planning at an urban systems (district) level. The proposal comprised four main research themes:

- 1) Identify the significant features in existing and planned “low carbon communities” and, based on those findings, create a generalized model of a “low carbon community” that can be adapted to suit the (any) local context.
- 2) Qualitatively and quantitatively describe inner city redevelopment opportunities in the context of achieving emission goals. What might a low carbon community look like and how might it come about?
- 3) Investigate the Manchester district as an ideal site for redevelopment as a “low carbon community”. What might Manchester look like and how might it come about?
- 4) Work toward creating a computer model of the Manchester district to calculate the relative lifetime costs and benefits of the proposed “low-carbon” urban redevelopment scheme (in contrast to those incurred developing as per the status quo).

The first two themes are encompassed by our parallel “precedents” research which has identified more than a dozen comparative urban redevelopment sites, mainly in northern Europe, but including several North American, Canadian and local examples. Our goal for this phase of the project is to identify the specific social, environmental, political, economic and cultural conditions by which each of these transformative projects came to be to see if there are broadly corresponding processes that can be developed into a generalizable model of transformative urban development.* For example, in each of our case studies a political champion (either an individual or a group) was an essential element of the project’s success.

While there is considerable overlap in the research themes, the workshop centred on the third. Here we wanted to take what we had already learned (from the student work and from our precedents work) to use as a baseline for answering the question: “What would it take (practically and politically) to move the “low carbon community” concept forward in Calgary, specifically in Manchester?” Seeking this answer stimulated the idea of a workshop where local experts and stakeholders could together consider the question and share their experience and knowledge in response to it.

Workshop FAQ and the vision for Manchester

Why

There were two main goals for the workshop. The first was collaborative engagement, a hallmark of contemporary planning. The Manchester Project is not straightforward; in fact it is unimaginably complex. Tackling complexity successfully requires a diverse array of knowledge, skills and

* We have recently concluded an extended research field trip during which many of these developments were visited. We expect to have results published by the end of 2013.

understandings. As part of our research plan – to initiate and facilitate a wider dialogue about Manchester – we reasoned that having a public event, to which such an array of individuals could be invited to discuss the idea, would help us achieve that goal. The second goal was to create a framework to gather and quantify the input of individuals, knowledgeable in the local context, working in a collaborative setting. This strategy both contributed to our general model of transformational urban redevelopment and provided insight into how local conditions serve to enable or prevent Manchester-like places from actually becoming.

How

As a strategy of securing a critical mass of participation we decided to engage individuals, groups, businesses and organizations personally. Between September 2012 and March 2013 we contacted more than 100 individuals and organizations and visited more than 80 different venues where we presented a slide show illustrating our concept for Manchester and showed examples of work already completed by the University of Calgary students. There were three goals for each visit. First, was to introduce people to the Manchester concept. Second was to solicit feedback to create an initial list of barriers (which later provided the point of departure for the workshop). The third goal was to make people aware of the workshop and invite them to attend. To extend our network we also solicited the names of other individuals or organizations who might be interested in our project. In all 120 invitations were sent out, even as we continued to identify new potential stakeholders. Approximately 65 individuals participated in the workshop.

Who

Our aim was to invite to the workshop the widest array of diverse, yet informed, interests and perspectives as possible. We began with our personal contact lists and as we learned more about Manchester from early interviews, new potential stakeholders were continually being identified. In the end we solicited participation from academia (including students), the public and private sectors, social and non-governmental organizations, community groups, working and retired professionals (from all walks of urban life), land owners, and business owners.

What

The workshop activities were based on an approach known as “backcasting.” In contrast to most planning methods in which urban spaces are designed according to projected trends, backcasting first defines a desired end point, and then works backward to see what policies and actions will be necessary to arrive there. The most basic requirement for backcasting is an informed vision or description of the desired destination. Predicated on our baseline research, we chose a set of descriptors that would sufficiently describe (from a carbon emission reduction perspective) the desired outcome in the local context of Manchester. Further, in deference to the complexity of the challenge, we subdivided the overall vision into a discrete set of seven “knowledge spheres”: 1. Food, waste, water; 2. Governance; 3. Land use; 4. Energy; 5. Transit; 6. Housing; and, 7. Industrial development. We hoped these categories would facilitate individuals participating in a forum closest to their specific domains of expertise.

Since our desire for the day was to focus on building scenarios and not the vision itself, and with the complete understanding that any particular vision can be contested, we asked participants to accept (for the purpose of the workshop) the vision we presented as a reasonable facsimile of a low-carbon

community as it might evolve in Manchester. With that said each vision element presented was drawn from real-world examples and each is consistent in all ways with Calgary’s significant planning documents.

The vision

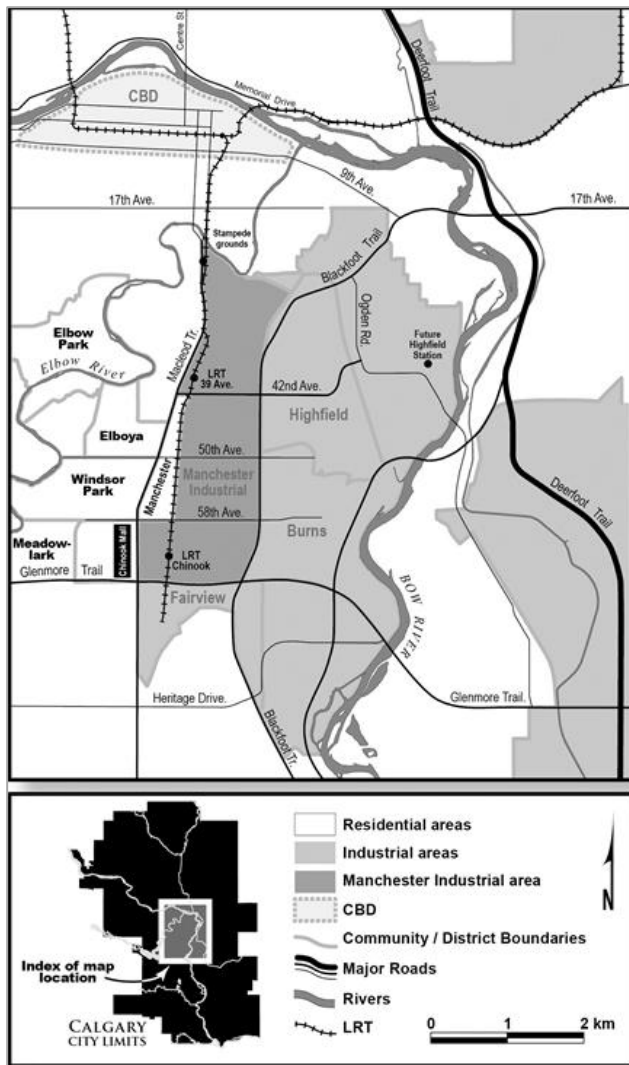
State of Manchester today	Vision for Manchester 2060
<p>Low density, low-rise, low-intensity inner-city industrial district with a small residential presence.</p>	<p>High density, high intensity, triple-mixed use urban neighbourhood with a diversity of housing choice. Many neighbourhoods are family-friendly complete with schools, parks and other public amenities.</p>
<p>Most (but not all) heavy and medium industry is gone. Today land uses consist primarily of: Freight and logistics, warehousing and storage, wholesale and commercial retailing for home repair and renovation, car and engine repair, mechanical and electrical service, big box retailing, and a large selection of small, unique businesses.</p>	<p>A high density employment hub is located in close proximity to residential areas. New methods of industrial production and “reshoring” of manufacturing creates opportunities for innovative design in mixed use development.</p>
<p>Two LRT stations. No significant residential land uses within 500 metres of either station. The 39th Ave. station particularly is wastefully underutilized.</p>	<p>Three LRT stations (spacing allows for a new station at 50th Ave.). Intense TOD nodes at 39th Ave and 50th Ave and development of 61st Ave. “high street”</p>
<p>Most service and employment destinations do not benefit from public transit (auto-dependent).</p>	<p>A high-quality transit system is extended throughout the neighbourhood; a streetcar network doubles as a materials delivery system. High intensity commercial and residential development along intra-neighbourhood mobility corridors and MacLeod Trail stimulates economic development.</p>
<p>No master plan to coordinate multiple planning and sustainability objectives</p>	<p>A master plan with associated changes and modifications to zoning bylaws direct and incentivize development of desired uses. A formal steering committee (with access to resources) implements the master plan.</p>
<p>Unknown but significant amount of land remediation is needed</p>	<p>Land remediation strategies are integrated into the master plan.</p>
<p>High fragmentation of land ownership</p>	<p>Significant bundles of land have been aggregated for public benefit</p>

The study area

The Manchester district is 520 hectares in area. It is located in the south east quadrant of the inner city and comprises two city districts: “Manchester” (an adjacent but segregated residential district of 50 hectares) and “Manchester Industrial” (470 ha). Named for the great English industrial metropolis, Manchester was commissioned in 1911 during an economic boom to be the city’s primary heavy industrial area. However, the hoped-for development did not fully materialize until after

the discovery of oil at Leduc in 1947. The new energy economy allowed the district to prosper and a vibrant working-class neighbourhood, including an elementary school was built. It was fully occupied by 1960 and reached a peak population of 800 in 1968. However as more attractive and increasingly less expensive housing options emerged on the suburban fringe, and as a stigma for living near industrial land evolved, the neighbourhood declined. By 2011 only a small residual remnant of the original residential structures was intact these serving mainly as rental housing or as converted professional offices. The school closed in 1973.

Today the area is served by two transit stops but a lack of residential density limits their effectiveness. At its closest Manchester is only three kilometres from the central business district (CBD) providing excellent access to the core. Little manufacturing or heavy industry can now be found in Manchester with land uses chiefly devoted to logistics (warehousing and distribution); commercial, industrial and wholesale retailing; specialty auto and truck servicing; home renovation supply and services; and, big-box consumer retail operations. As well, many



Cartographer: Robin Poitras

small businesses, from professional services to real estate offices are distributed throughout the district. The northern-most section of Manchester is city-owned and used for fleet storage and maintenance as well as various repair depots and service centres and is home to the Calgary Water Centre. Overall, Manchester is characterized by low density land uses having an average floor/area ratio (FAR) smaller than one on most blocks. Estimates based on previous work show that 60 percent of the land surface in Manchester is devoted to automobile infrastructure (roads and parking).

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Part 2: The Workshop

About the day

The Manchester Project workshop was held on May 15, 2013 at the University of Calgary's downtown campus. Registration began at 8:00 a.m. with breakfast being served. During the first part of the morning the audience heard several presentations. The breakfast keynote was delivered by Senator Ron Ghitter (excerpt on following page) who struck exactly the right tone for the day speaking on the topic of "What would make Calgary a great place?" Next was a 12-minute "This is Manchester" video produced by recent Urban Studies graduates. The video provided a short history of the area explaining how Manchester has evolved into its current form and took us on a "virtual" tour of the district as a way of imparting a strong visual representation of the area (See the video on YouTube: <http://youtu.be/VI5sk701csw>). To complete the introductory session, Noel and Geoff gave a short presentation to refresh people on the Manchester Project, to recap the vision and its origins and to explain the day's activities. The program for the remainder of the day comprised three active sessions, one before lunch and two afterward, with a recap and summary provided at the end of the day by Brent Toderian who was also our noontime speaker. A poster exhibit, displaying work done by University of Calgary graduate students, was on display in the working area.

About the working groups

The Manchester Project is complex because achieving urban sustainability is a complex undertaking. To adequately address the complexity challenge a deep pool of specialized talent and expertise is needed. At the same time, a critique of current planning regimes is that too often areas of specialty operate in silos with little communication between or feedback from others. One goal for planning the workshop activities was to find a meaningful way to acknowledge this apparent contradiction.

From a practical perspective, we needed to organize the day to maximize the opportunity for each participant to easily contribute within their particular expertise. But organizing complexity is not simple. In the end we settled on seven domains or "knowledge spheres" knowing there were interconnections between them all. We could have had more or fewer categories but to optimize the ability for individuals to contribute we wanted groups of no fewer than eight but no more than ten people in any one group. Based on our expectation of 55-65 participants we decided on seven high-level categories. (Food, waste, water; Governance; Land use; Energy; Transit; Housing; and, Industrial development) which roughly correspond to recognized specialties within the broad context of theoretical and applied urbanism. At the end of this section is presented a short version of the vision for each knowledge sphere, a list of the participants and the top barriers identified by each group.

An excerpt from Senator Ron Ghitter’s address to the Manchester Project Workshop, May 15, 2013

...In Calgary this movement [to the core] is evident as high-rise office buildings in the downtown continue to be announced at an unprecedented rate. In concert numerous future condo and rental high-rise residential buildings fill our skyline with their cranes throughout the core and near LRT stations

More Calgarians are being attracted to the urbanization of our city and the many benefits of life in the inner city. But all the advantages of inner city living are not realizable for many Calgarians. Living in the inner city is expensive. Mount Royal, Elbow Park, Killarney ... and other districts are out of the price ranges and dreams of most Calgarians. Economics, more than anything else, drives them to suburbia where they can purchase a reasonable home at an affordable price.

In the view of many young families apartment life is not conducive to family living (a debatable point) and for some it may be that suburbia *is* close to work, as in the case of the communities of Cranston, Seton and Mahogany that are close to the new hospital in the south.

But as the office buildings in the downtown continue to multiply (3.5 million further sq. ft. in the mill as we speak), and as thousands more employees come downtown to work each morning, life in the inner city becomes more appealing, particularly to the young and retirees. And so the demand for affordable inner city housing continues to grow.

So do we continue to permit the outward growth of our city – sprawl as it is known – or do we demand more densification with all that that entails? Is there room for both? And what can the municipal coffers really afford?

This is a very topical subject in our city. On Monday of this week city council debated a

Growth management strategy to determine our future development pathways. The development industry, in a rather shallow argument, warned that the growth plan would boost home prices and undertook to pay all infrastructure costs themselves (as if that wouldn’t boost home prices). They didn’t say if they were going to pay for the police, fire, schools, bus services and more that are required when new outlying districts are developed.

The atmosphere has become heated as exemplified by the sometimes acrimonious debate raging with our mayor and some alderman on one side and representatives of the development industry on the other. It is a debate worth having, and although the city would be better served by less rhetoric and more considered discussion and collaboration, the issues must be defined, a consensus reached and action taken

It is a debate around vision, the vision of what our city should become, a debate centering on what we can afford and who should pay, a debate about our

commitment to the environment and a debate that must be transparent and take place in an open forum so that Calgarians will have a say in the city they wish to live in today and 60 years from now.

I must declare that I am a proponent of more density within our existing city boundaries that provide residential opportunities at affordable costs – a very difficult objective to realize in a day of burdensome land costs

There must be a balance and it will be created by priorities established at city hall

For a copy of the complete speech send an email to: gghitter@ucalgary.ca or click [here](#)

“It is a debate around vision, the vision of what our city should become... There must be a balance and it will be created by priorities established at city hall.”

About the active sessions

One of our challenges was to create a program that would achieve our goals for the workshop while simultaneously keeping 65 busy individuals interested and engaged. After long discussions we settled on three participatory activities. In the first session working groups would scrutinize a preliminary list of “barriers” (composed based on our pre-workshop engagement process) after which they were presented with two tasks. The first was to discuss the merits of the list, add barriers perceived as missing and rank the five most important barriers with reference to that particular knowledge sphere. We wanted the groups to base their rankings on these considerations: the difficulty in overcoming the barriers, the appropriate level of governance for handling the barrier, the level of management and investment needed to overcome the barrier and the timeframes appropriate for dealing with specific issues. We expected each group would have a unique list but that many groups would have barriers in common. The second task was to identify potential strategies to surmount the barriers and to identify precedents (if possible) where the strategy had been deployed. We asked the groups to note (if possible) important elements of each proposed strategy; for example, the lead agency, the stakeholders, the timeframes for rolling-out the strategy, the level of difficulty in overcoming the barrier and the resources that may be required to deploy the strategy.

The second active session was conceived to address the silo issue. The concept was to have travelling contingents from each knowledge sphere circulate to other groups to share the insights accumulated in the morning session. During the same encounter the group being visited would, in turn, share their experience. A movement was created[†] so that within the allotted time at least some members of each knowledge sphere interacted with each of the others groups. The shared knowledge gained during this activity was intended to inform the tasks scheduled for the third and last active session.

The goal of the third session was to refocus attention to the district scale by contemplating what a build-out scenario, directed by the accumulated goals of the knowledge spheres, might look like. Again, in deference to the desire for knowledge sharing between fields of expertise, the working groups were rearranged to create multi-disciplinary teams to tackle the final assignment. Each team was tasked, using the strategies developed during the first sessions, to design a flow chart of milestones, activities and responsible agents over short-, medium- and long-term time horizons.

Activities assessment

In this section we present a qualitative assessment of the day’s activities from two perspectives. First, how well did we do with respect to the goals we set for each session and for the day (see previous sections) and secondly, how well did the activities work from a practical point of view, both individually and together as a whole? Our assessment is based on several debriefing sessions where the Workshop Team met together to share their experience of the day.

In terms of achieving the goals for the workshop we felt the event was successful. Our strategy to conduct pre-workshop interviews paid off in terms of reaching the attendance thresholds and diversity

[†] The working groups were split into a traveling group and a stationary group. Every 15 minutes the traveling groups move and each stationary group receives new visitors. After three moves the original groups reunite to reconsider the morning’s work in light of new information gleaned from each of the six other spheres.

needed to make the outcome of the day meaningful. Although some invited stakeholders we thought to be key did not (or could not) attend and even as by the end of the day we had lost about one third of our morning numbers, we believe the awareness raised and the information gathered bodes well for future research and for action to move the Manchester Project forward. We are aware that our invitee list was imperfect; however, we have continued to add to it in anticipation of future activities. For this preliminary conversation we were satisfied with the diversity of voices at the table.

The degree to which interest and engagement were sustained is an assessment best left to the participants, however; we felt Senator Ghitter's breakfast speech served the exact purpose we had hoped for by expressing simply and forcefully the urgent need for creating new urban solutions and the immense opportunity Manchester provides to meet the sustainability challenge. The short video presentation gave an abridged history of the district and a visual sense of Manchester as it is today. The poster boards displayed in the working area portrayed future scenarios for participants to view and consider during the working sessions. All this together set the mood and established the conditions for a productive day.

Session One The first session was vibrant and lively. For this session participants were at the peak of their energy and attention. Conversation at the tables was lively although the direction of the discussion did not always proceed as planned. One reason was the complexity of the problem. People immediately realized that barriers within knowledge spheres affected others and vice versa. Often progress in one sphere depended on issues being resolved elsewhere; for example, the top barrier to achieving a sustainable food, waste and water system was, at least in part, a land use/zoning issue. This contrast came to light in several groups in different ways and pointed out the need to explore the issue of scale when considering ambitious urban transformation plans such as the Manchester Project. It also provides insight into how hierarchies of barriers and institutional arrangements play a role in maintaining current, unsustainable development pathways.

Session Two The second session provided a forum for the knowledge spheres to interact, share and learn. Our table monitors all felt this was a worthwhile activity which honoured our intention to create a way for the specialized knowledge created within one knowledge sphere (silo) to be shared and considered in light of other concerns and perspectives. However, partly due to the timing of the session (first activity after lunch) and partly due to a noticeable decrease of energy in the room, we felt it prudent to cut the activity short to 45 minutes from the 75 minutes originally scheduled and to bring the day to a close 45 minutes early.

Session Three Approximately 45 of our original 65 participants remained for the final session and were redistributed into six working groups instead of the seven originally planned. The goal of the session was to create a roll-out plan for a hypothetical Manchester Project by having interdisciplinary groups identify discrete actions to address specific barriers. This exercise yielded an important milestone because these recommendations, when considered together, create a blueprint and a timeline for action. What happens next in the life of the Manchester Project will follow from the work accomplished here.

We wanted to end the event without a recap of the day's work. For this we asked our noon speaker, Brent Toderian, who had been sitting-in on various groups as they worked during the afternoon, to give us a brief assessment of the workshop in a way that reinforced the high level goals of the Manchester

Project, put the project in global context with large scale urban redevelopment and acknowledged the value created in the room that day.

Overall Assessment We are very satisfied with the results of the workshop. From a practical perspective, it might have been wiser to have had only one session in the afternoon, rather than two. While we still feel the goal of silo-breaking set for the second session is a necessary and non-negotiable element of participative planning, it was perhaps too ambitious to build this into the limited time available this day. But this illustrates another barrier, the messiness of inclusiveness. Hearing alternative, non-expert voices takes time and effort, two commodities in limited supply in contemporary planning and development processes. In this instance though, it probably would have encouraged more people to remain for the afternoon activities if we had shortened the program.

Each of the active and investigative goals we had set for the day was accomplished. While there were no big surprises arising from the findings of the workshop, the initial list of significant barriers was validated and augmented. The data collected serves to focus attention on moving the Manchester Project forward.

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The working groups: Visions, barriers and participants

In this final section of Part 2, we present a more detailed look at the working groups. For each we present the group's working vision, which was – like the overall vision for Manchester – derived in light of current and previous research, a list of the participants in each group and a list of the top barriers identified within that knowledge sphere. The final compilation of barriers is offered in Part 3 of this report. Although we present the affiliation of each participant (to illustrate the diversity of voices at the table) we do not imply the participant was representing the interests of their affiliate. During the orientation participants were expressly reminded that it was their view (as an urban professional and citizen of Calgary) we were seeking not those of an employer or other interests. The names of our team members are denoted with an “*”.

Group 1, Waste, water & food

The Manchester district creates almost no waste. This was achieved by diverting solid waste to industrial processes (energy production and materials) or to recycling. Hammarby-Sjöstad, Stockholm is one example of a district-wide system that supports solid waste collection while organic waste is eliminated through a comprehensive composting program. Heat energy, nutrients and water are captured from the solid and liquid waste stream and reused and recycled in the district. Given the industrial building stock Manchester provides opportunity for economically viable, rooftop urban agriculture. The food system comprises hydroponic production, community gardens and commercial enterprises and is managed to optimize local food production systems, create employment and reduce the large carbon footprint associated with current practices. Water-capture systems make optimal use of local precipitation.

Group 1 Participant List

Bernie Amell	Riparia Ltd.
Carolyn Bowen	City of Calgary (Office of Sustainability)
Victoria Campbell-Arvai	University of Calgary (Post-doctoral fellow)
Julianne King	Urban food
Les Kuzyk	City of Calgary (Land use and planning)
Paul Needham	University of Calgary (Urban Studies)
Kerry Ross*	University of Calgary (Geography/ISEEE)
Robin Sauve	City of Calgary (Environmental Services)
Kyle White	City of Calgary

Waste, Water Food, Top Barriers

1. Locate industrial adjacent to residential (land use zoning, bureaucratic silos, health codes)
2. Economics of urban agriculture
3. Integration with city infrastructure
4. Resistance of public to change
5. Competing development opportunities

Group 2, Governance

The realization of a comprehensive vision requires the creation new institutional capacity to oversee and guide development over a 50-year period. The management entity facilitates decisions on planning, financing, infrastructure (including land remediation, water, transit, district energy and sustainable building standards) securing opportunities for affordable housing; and the recruitment of developers and industrial enterprises to the district.

Manchester's fragmented land ownership pattern presents challenges for master planning and land assembly. Achieving the overall vision requires innovative thinking to effectively manage this problem. This might require new kinds of partnerships between local, provincial and federal governments, the private sector, communities and other stakeholders. A "big-city" charter in Alberta may allow the city greater scope for raising the capital necessary to underwrite the improvements needed to make the area commercially viable. A diverse variety of mechanisms, programs and incentives, from varieties of public-private partnerships to the emergence of local business and community partnerships (e.g. Land Trusts), stimulate the desired land uses to emerge naturally.

Group 2 Participant List

Andreas Bayer	Honorary Swiss Consul
Martin Cohos	Cohos Evamy Partners
Chris Davis	Davis, Jensen Law Offices
Ron Ghitler	Guest Speaker
Corinne Keough*	University of Calgary (Urban Studies)
Karly Morgan	Federation of Calgary Communities
Barry Phipps	University of Calgary (Urban Alliance)
Jaydan Tait	Brookfield Residential

Governance. Top Barriers

1. Realistic assessment of market potential; cost of remediation, unattractive to investment, fractured ownership, competing development opportunities, no champion
2. Ownership and governance; less traditional vehicles for change with move away from ARP to nodes and corridors

Group 3, Land use

The distribution of residential, commercial/retail and industrial/manufacturing land uses varies across the district, sub-district, neighbourhoods and precincts, block-by-block and even building-by-building. Areas predominated by industrial activity are located in the east central part of the district (following current patterns). Extending in a radial fashion east, north and south (right) is a transition to the commercial and residential areas that are most intense along Macleod Trail and around the transit nodes at 39th Ave., 50th Ave. and 61st Ave.

Manchester retains and enhances existing industrial activity in ways compatible with other land uses by locating, for example, artist lofts and mixed activities adjacent to industrial lands. Compatibility is achieved by locating light industrial land uses in transition zones and by designing material and goods movement in the district to avoid excessive noise, dust, and congestion. Land uses comprise a network of integrated green spaces and corridors, public plazas and institutional buildings (including schools, recreation facilities and municipal and emergency services).

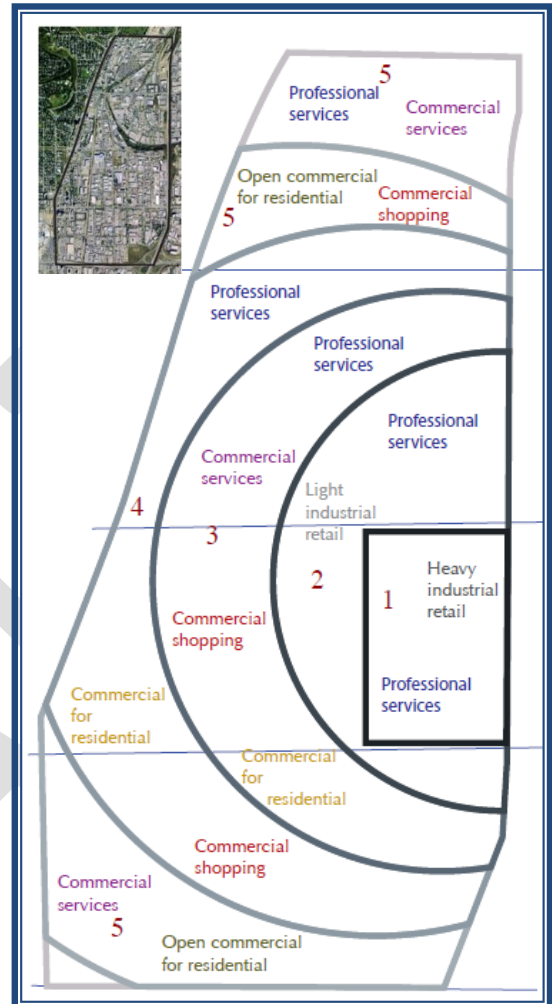


Image credit: Ana Karinna Hidalgo

Group 3 Participant List

Jamie Clark	Gibbs Gage Architects
Jim Edwardson	Manchester Properties Inc.
Peggy Hedges	Haskayne School of Business
Ana Karinna Hidalgo*	University of Calgary (EVDS)
Richard Parker	Richard Parker Consulting
Erin Shilliday	Delia Design Company
Lothar Wiwjorra	City of Calgary

Land Use, Top Barriers

1. Fragmented policy and planning process
2. Locating next to hazardous land uses/ contamination and liability issues
3. Infrastructure financing

Group 4, Energy

The strategy for provision of energy to the Manchester district began with a determination of energy demand (electricity, heat, light and motive power) and how much energy is available directly to the district (insolation, biomass from organic and industrial waste and waste heat from industrial processes). The backbone of the physical energy generation and distribution infrastructure is a combination of distributed and district energy. The majority of buildings are net-zero or equivalent sometimes generating their own energy. Demand and supply are managed through the district energy system. Examples of current net zero building design include the Bullitt Building, Seattle; Avalon Homes Net Zero, Alberta Calgary, and the University of British Columbia Centre for Integrated Research in Sustainability. Energy captured from wastewater (see Olympic Village, Vancouver; Docklands, Victoria) will also be managed through the district energy system. Combined heat and power (CHP) will supplement energy demand (heat and electricity) using some combination of natural gas, wind, and solar energy with the potential to access hydro-electricity supplied through a western Canada grid.



Group 4 Participant List*

Patrick Bohan	ENMAX
Scott Gair	Citizen
Bob Hawkesworth	Municipal Climate Change Action Centre
Ben Herrel	University of Calgary (Urban Studies)
Lesley Kalmakoff	City of Calgary
Tim Kitchen	Husky Energy
Jim Love	University of Calgary (EVDS)
Aida Nciri*	University of Calgary (Geography/ISEEE)

Energy. Top Barriers

1. Social barriers to change (including role of private automobiles)
2. Not enough synergy between processes; organizational inertia, complexity of logistics, who benefits/pays for improvements?
3. Infrastructure financing (municipal access to capital)
4. Land Use bylaws (Policies and incentives)



Group 5, Transit

Private auto use has declined significantly due to the development of an integrated public transit network that provides high quality access and penetration both inside and out of the district. Significant upgrades to the existing LRT stations (39th Ave. and Chinook) and the development of a third station (at 50th Ave.) makes the district a commercial destination drawing visitors from all over the city. Internally, the development of a dense streetcar network (which doubles as a materials delivery system) stimulates billions of dollars in private investment. Other elements of the transit network include a community-operated or private car-sharing program and significant investments in biking and pedestrian infrastructure.



New strategies for reducing car traffic have been adapted from innovations developed in European cities and elsewhere. For example, residents of the car-free district of Vauban in Freiburg, Germany, which is well-served by public transit (left) must buy a parking space (whether they own a car or not) in a community parking garage (right). Owners guaranteeing they will remain “car-free” can opt out of the mandatory requirement to purchase parking.

Large-truck traffic is aggressively restricted. A multi-modal rail and truck terminal on the east side of the district facilitates most of the goods and material movement into and out of the district. Material movement through the district is provided via a combination of rail, light electric truck (perhaps utilizing airport style baggage movement systems), and human powered modes (e.g. cargo bikes).

Group 5 Participant List

Claire Beckstead	Pembina Institute
Rob Birch*	University of Calgary (EVDS)
Gian-Carlo Carra	Alderman Ward 9
Philip Dack	Planning consultant
Ryan Martinson	Stantec
Afrah Rayes	City of Calgary (Complete Streets)
Bryndis Whitson	Van Horne Institute

Transit, Top Barriers

1. Role of private auto; how to start this conversation (need to start now)

2. Internal goods movement (what are current practices relating to goods movement; time of day protocol for distribution)
3. Infrastructure financing
4. Design
5. Internal/external connectivity (how does land use and built form respond and adapt to increased accessibility?)
6. Land ownership and fragmentation

Group 6, Housing

Manchester District is home to 100,000 people living in approximately 40,000 units. Housing ranges from single-family detached neighbourhoods to high-rise condominiums. Mid- and high-rise housing includes mixed-use retail and commercial uses and appropriate light industrial activity. The district has an abundant supply of entry-level and mid-level housing ensuring community life cycle needs are accommodated. For example, abundant family-oriented housing keeps local schools viable while a range of options for seniors enables “aging-in-place”. Housing is integrated so that non-market housing is indistinguishable from market housing. Manchester’s supply of rental housing comprises a significant proportion of the district’s housing stock.

To achieve affordability, Manchester pioneered creative and innovative approaches to the provision of housing which included more participatory forms of community and building design; innovative live-work arrangements; container and modular forms of building and organic approaches to community design.



Affordability strategies include using city-owned lands to build off-market housing with ownership schemes ranging from government-owned-and-operated social housing to cooperative and co-housing alternatives. Community land trusts are another mechanism that can help manage affordability.

Group 6 Participant List

- | | |
|----------------|------------------------------------------------------|
| Sarah Arthurs | Alberta Community and Cooperative Association |
| Liam Cummings* | University of Calgary (EVDS) |
| Garratt Hooker | Executive Assistant, Kent Herr (MLA Calgary Buffalo) |
| Tom Kerwin | CMHC (Ret'd) |
| Verna Leask | Meadowlark Community Association |
| Graham Livesy | University of Calgary (EVDS) |

Elizabeth Michnowski

Anand Mishra

Gord Sand

David Watson

Interior Designer

Canadian Mortgage and Housing Corp.

John Howard Society (Manchester landowner)

Attainable Homes Calgary

Housing. Top barriers

1. Market forces
2. Land use bylaws (integrating industrial/residential) ; zoning; residential NIMBYism
3. City lacks jurisdiction to mandate inclusionary zoning
4. Fragmented land ownership
5. Financing alternative housing forms
6. Governance: need structures and processes that allow for cross sector understanding, cooperation and collaboration. Is there a shared goal?; the barrier is about bringing different sectors to the same table

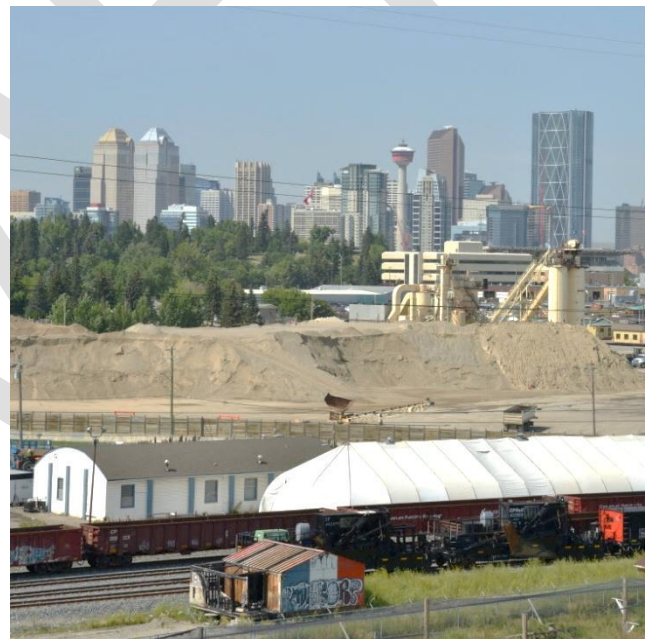
Group 7 Industrial development

Using more land-intensive models of industrial activity – multi-story facilities and more compact infrastructure, the Manchester district is an employment hub for 50,000 jobs, including many in industry and manufacturing.

Industrial activity is organized around the idea of industrial ecology. This way of organizing industrial activity produces zero waste as excess materials and energy are captured, recycled and reused.

Industrial activity is managed through a district logistics and management facility. Its role is to create the industrial ecology by identifying and exploiting synergies between existing and potential enterprises, filling vacant niches and recruiting catalyst industries. Energy provision and material flow logistics between enterprises and into and out of the district are managed by the same team.

The district is supported by a centrally-located research and development facility. The facility is a joint venture between the municipality, industry, and Calgary's post-secondary research institutions. The centre supports a varied menu of research developed in response to the needs of the district as it evolved. Manchester is a "seedbed of innovation" for bringing cutting edge urban design together with the practical realities of sustainable urban development. Governance models for the district ensure multi-stakeholder participation in all aspects of economic and social improvement. A significant urban



tourism sector has evolved as visitors from around the globe including thousands of urban professionals, visit the urban marvel Manchester has become.

Group 7 Participant List

Dick Ebersohn	City of Calgary (Senior Sustainability Consultant)
Geoff Ghitler*	University of Calgary (ISEEE)
John Hankins	Questor Tech
Paul Leong	City of Calgary (Environmental Services)
Hayden O'Connor	University of Calgary (Urban Studies)
Matt Rockly	City of Calgary (Centre City Team)
Mark Szabo	Karo Group
Josh White	City of Calgary (Mayor's Office)
Roy Wright	Roan Consulting

Industrial development. Top Barriers

1. Competing market opportunities: competing against other (perhaps less complicated) development opportunities in Calgary. Also competing priority for city to invest a portion of its capital budget
2. Logistics of transition; how to deal with fragmented ownership, infrastructure needs/costs
3. What is the business case; competing priorities, environment and health concerns, land use, incentive, services, costs, innovation; perception acceptance, attraction, NIMBY; clear vision, incentive opportunity
4. Use of term "industrial" is negative; marketing, branding and perception

Part 3: Outcomes

In the final section of the report we outline our findings in two categories. After a contextual introduction we present an annotated list of the “top ten” barriers perceived by the workshop participants as most critical within and between knowledge spheres. Along with the ‘top ten’ is a listing of various strategies the workshop teams proposed to overcome the aforementioned barriers. Not surprisingly, we found that the same strategy was often proposed as a response to multiple barriers. To conclude we recommend three specific actions that address the short-term goal of putting Manchester on the “official” city agenda.

Barriers and strategies “Top Ten”

We derived the list of barriers by first transcribing data from the information sheets (assembled during first activity session) into a matrix which was used to organize the content and search for similar patterns between groups. For each knowledge sphere we made a list of barriers and placed the suggested strategies for overcoming them in the next column (often there were multiple strategies for a single barrier). Next we searched for general patterns that repeated across knowledge spheres. Once a set of themes was identified each barrier and strategy was scrutinized and assigned membership to one or another of the themes. The list below is the result of that synthesis. As well we have listed the suggested actions recommended by the groups (expressed generically) as strategies to overcome a particular barrier. Our interpretation, arising from discussions during debriefing sessions, attempts to connect some of the complex relations within and between silos with the intention of identifying the “next” set of actions in Manchester’s evolution.

At the highest level we identified two “sorts” of barriers; “deep cultural” and “practical/technical”. Deep cultural barriers are entrenched, deep-rooted, local, regional and (sometimes) universal norms or ways of living. Deep cultural barriers are about taken for granted beliefs and habitual social practices. These barriers are hard to overcome requiring the resources for a long-lasting commitment to debate, questioning and contestation. In contrast practical/technical barriers are about standards, professional practice, prevailing economic models and socio-technical systems. Often practical/ technical barriers inherit the inertia of prevailing planning cultures, professional practice and market forces. These barriers usually have identifiable solutions although social and economic pathways to them may not yet exist. Adding to the complexity is the fact that deep cultural and practical/technical barriers are deeply intertwined. Addressing any particular barrier quickly results in entanglement with many other barriers. To address these barriers and realize a new vision for Manchester, new configurations, confederations and coalitions of stakeholders will need to form disrupting both cultural norms and established socio-technical systems.

Top 10 Barriers

1. Planning System Inertia, Land Use Zoning and The Triple Mix

1. The policies that restrict and enable land use emerged as a critical consideration in every group.

Planning regimes evolve over time. Modern planning emerged as a response to the health and safety concerns of unregulated urban development where polluting and toxic factories operated alongside homes and inadequate water and sewer systems promoted disease. The response was to implement rigid land use segregation where residential, commercial and industrial activity was strictly separated. Over time the response has had unintended consequences such that the need for routine travel between the now distant sites of home, services and work was met by designing cities for the automobile. Even as the pendulum about what constitutes good urban design changes the desire for walkable, mixed-use communities has to contend with entrenched planning codes formulated to separate uses.

Planning system inertia dictates that at least in the short run, the time frame for election cycles or land development processes, the established way of doing things is generally less time consuming and costly. Change introduces more unknowns and associated risk. The question of who bears the risk – government, taxpayers, land-owners – becomes contentious. In response to risk, planning regulations may become even more onerous and developers set the investment decision bar higher.

In the context of re-development in established communities there is a growing expectation of engagement with existing residents and businesses. In itself such processes increase project timelines and inevitably the economics of development. Additionally, the development process has to deal with change-averse communities and NIMBYism, sometimes justified, sometimes not.

The planning process has come a long way toward incorporating residential and commercial land use mix but there is little if any experience with the triple mix that also incorporates industrial land uses. Finally, from the New Urbanist movement there is the challenge to the very idea of land use zoning, and the proposition for new approaches such as form based codes.

2. Infrastructure Financing

2. The transformation of Manchester will be expensive. While life-cycle analyses demonstrate the real possibility of long-term cost savings and social benefits, the up-front costs of getting from here to there is substantial. The fragmented ownership in Manchester is an additional complication.

The timing for the implementation of major infrastructures to support low carbon development is critical. To cite three examples, district energy infrastructure, transit infrastructure and land assembly have to happen at the front end of any redevelopment. These are expensive undertakings with long horizons for payback. Particularly in a conservative political climate, significant political capital will have to be expended to allow such investment to be made. The level of investment required is beyond the typical development levees imposed on private development. A significant portion of the return on investment for such infrastructure, while real (for example reduced public health care costs, improved longevity, or climate change mitigation) is not typically captured by the conventional balance sheet.

There are potential financing models, for example Tax Increment Financing, but they are not proven on

such a scale and it remains to be seen how well they perform in places like East Village. Other options include public private partnerships or community public partnerships. Innovative solutions, political will and community buy-in will be required to make the required infrastructure investment a reality.

3 The Business Case

There was a strong consensus from the workshop that the private sector must play a critical role in the transformation of Manchester. If for argument sake, the major infrastructure investment were secured, it still remains to make the business case to individual landowners and investors, to invest in the Manchester vision and was true whether speaking at the scale of individual projects or the district as a whole. The same is true for the city when comparing new growth scenarios to those already in play. Is the public benefit worth the investment needed to reformulate existing planning models? Why would someone choose to invest in Manchester as opposed to other (less complicated) business opportunities? Where will current businesses go as rents increase? Will the carbon benefits gained locally translate into changes at the scale of the metropolitan region or will it just rearrange current output? How will the district compete for already-scarce city resources to underwrite infrastructure upgrades? How will the desire to put a large job concentration adjacent to high-density residential areas be implemented? How will risk be apportioned? Which incentives will be politically, economically and socially acceptable?

Strong partnerships, along a continuum from completely private to completely public, of existing and yet-to-be-discovered alliances, will be essential for success. Non-governmental and community and social benefit organizations and arms-length governmental (e.g. Attainable Homes Calgary, Calgary Municipal Land Corporation, ENMAX) must work together to achieve the vision. Engage academia to help develop new urban growth models that respond to environmental and social imperatives.

4 Entrenched Attitudes and Behaviours vis-à-vis the Private Automobile

This deep cultural barrier was explicitly identified in several groups. Changes in car culture, consumer expectations (for detached houses with large yards), an aversion to mixing economic classes, perceptions on living near “industrial areas” or in mixed social environments and perceptions of family life in dense urban environments were among the concerns raised. New models for creating economic and social value in the public realm are slow to be accepted because they challenge existing norms.

Four generations have now grown up with the private automobile. It has been the dominant form of urban mobility in North America for at least two generations. The automobile has been the single biggest factor shaping land use in Calgary. As a result there is a widespread belief that the automobile is a basic necessity. For many imagining life without a car is difficult. For many if not most Calgarians living without a car in Calgary’s current urban form is next to impossible. Increasing transit, bike and walking infrastructure investment is changing the perception and the reality, but slowly.

Arguably an even larger barrier to change is the cultural attitudes to the automobile. The car has come to represent freedom. It is closely tied to many peoples self-identity. It is as much a cultural as a functional icon in our cities. While there is evidence that this is changing for generation Y, will the

process of change be fast enough to support a radical new model of mobility for Manchester? Likewise land developers are reticent to propose a plan that does not accommodate the automobile as the dominant form of transportation. City planning is also slow to change. While planning theory advocates more walkable transit oriented communities, transportation engineering practice is steeped in the imperative to move cars as efficiently as possible.

5. Land Ownership and Fragmentation

One consistent feature of successful district-scale redevelopment projects is that large blocks of land are controlled by a single landowner, most often a municipality, which is able then to dictate the land uses and design characteristics consistent with its own sustainability vision. Moreover, ownership of large contiguous plots of land allows municipalities to achieve social and community goals that may be impossible otherwise. For example, development on publicly owned land could be partially devoted to affordable (non-market) social housing or other alternative housing forms – co-ops, co-housing, live-work, assisted living, etc. – allowing more blue-collar wage earners to live nearer to employment, shopping, recreation and municipal services.

Fragmented land ownership is also an impediment to creating and implementing a district master plan. In a free, open property market the ultimate development decision is up to the landowner, not the city or province. Coordinating the development strategies of individual landowners with the Manchester vision will be challenging.

The options are to craft a process that allows a high level of cooperation among a large number of landowners or create a model that allows the assembly of land in larger parcels with a higher level of public ownership. This could be achieved through a district-wide strategy or through a pilot project demonstrating utility, profitability and achievability at a sub-district level. A city charter could open new pathways to formulate infrastructure investment and expands the city's toolbox of incentives and penalties in support of assembly strategies.

6. Inability to Think Long-Term

While there was near universal agreement that climate change poses a serious threat to the future prosperity and sustainability of our city, there was also tacit agreement that such a seemingly remote and long-range threat was not enough to change behaviours. Perhaps as a species, certainly from a cultural perspective, we seem to be incapable of making decisions that are not heavily biased to the short term. This is a barrier from the level of the individual or the household, in our political system, and in our economic system. Unlike the seventh generation ethos espoused by indigenous cultures, dominant western culture seems to operate on year to year household finances, three year municipal election cycles and quarterly financial statements and relatively short-term return on investment calculations.

Through the imagineCalgary process Calgarians together considered the long-term future of our city. The challenge remains to align day-to-day and shorter term planning decisions to the 100-year vision that so many Calgarians helped create and endorsed.

7 Integration and Connectivity

Though the Manchester vision is of a relatively large city district more locally oriented than is the norm today with a high degree of walkability including housing, services and jobs it would not exist in isolation. For the district to ‘work’ it would have to integrate and connect to its urban neighbours, the city as a whole and the Calgary region.

The Manchester vision would see almost one hundred thousand new residents and ten to twenty thousand new jobs. Even achieving a more localized economy and social milieu where people live work, play and access services more locally would result in significant increases in number of people coming into and leaving the district. The qualitative and quantitative dimensions of impacts on neighbouring communities will need study and need consideration in any eventual district. Buy-in from adjacent communities will have a decisive influence on success or failure of the vision. Of particular concern is the permeability across Manchester’s boundaries that are currently very restrictive for anything other than automobile traffic.

From the perspective of city planning processes, there have been significant resources committed to the PLAN IT inspired nodes and corridors strategy. Putting a Manchester-like project onto the drawing board reorients priorities and requires significant reshuffling of the existing models. Although perhaps good in theory, the question to be asked is whether the sunk-investment in the current strategy is too extensive to warrant a significant change. Getting buy-in from city planning to adjust the current development strategies exclusive reliance on nodes and corridors, to one that incorporates Manchester (and perhaps other inner city industrial districts) is a significant barrier.

Calgary functions as a regional economy. Many of those who work in Calgary commute into and out of the city on a daily basis. The Calgary Regional Partnership is a joint effort of Calgary, other small towns and cities and rural municipalities. Imagining a major job centre and regional commuter node in Manchester will require alignment with regional jobs, housing, environmental and transportation strategies.

8 Stigma About Living Adjacent to Industrial Activity

As discussed in barrier one above urban planning was largely created to ameliorate the problems associated with noisy, dusty, dangerous industrial activity adjacent to where people lived. For over a hundred years the accepted wisdom has been that these land uses are incompatible and need to be separated. For good reason people accepted this thesis. Today, we are confronted with new realities – the imperative to adjust urban planning to the likelihood of a low-carbon future, the desire for more walkable communities with jobs, and services close at hand, and the possibility that industrial development does not have to be noisy, dusty, dangerous and toxic. The challenge for the Manchester vision is to actually design industrial activity that is demonstrably ‘clean’ and to overcome the entrenched stigma that living next to industrial activity is undesirable, lowers property values and is to be avoided if at all possible.

9. Contamination

This practical/technical barrier converges from differing perspectives. One is the stigma associated with living on or near once-contaminated land however safe it now is. A second is that the cost of land remediation may overwhelm the business case. A third is a sensitivity surrounding land values and proximity to remediation zones; the closer the land to a contaminated site, the less it is worth. Fourth is that the scope of the problem and the exact location of contaminated sites is proprietary and is not shared by the city making an overall assessment of costs difficult. Fifth is the lack of a direct line of communications between the province, which is legally responsible for contaminated lands, and the city, which must deal with them when contemplating new development.

10. Governance

All groups recognized the need for a robust governance structure to oversee the implementation of the Manchester vision. The structure would need the clear endorsement of the city, (support at the provincial level), the development community, business interests, and the larger community. Paramount among the groups assessment of the governance structure was the need for a champion to lead the initiative. It will require some mandate from the city to pursue the vision. It will require resources to develop a master plan and or pilot projects, raise capital for infrastructure, sell the concept and create the conditions for the innovation that will be necessary to overcome the considerable cultural and socio-technical barriers the project faces.

In the following table we list some of the potential strategies identified as solutions to overcome the key barriers.

Strategies

1. Design Demonstration Projects
 - “world’s best” case studies
 - Investigate potential sites in Manchester for a pilot project(s)
 - Create a vision for the demonstration project
2. Find/Recruit A Champion
 - Active mayor, local ward councilor
 - Suburban/urban coalition
 - Active citizen group
3. Assemble A Cross-Functional Team
 - Private sector, public sector, NGOs, citizen groups, academia and other stakeholders create multi-functional management team
 - Private public partnerships (PPP)
4. Build the Business Case
 - Competing development opportunities?
 - Assess risk and opportunity
 - Create new sets of allies
 - Tax increment financing (TIF)
 - Transfer of development rights (TDR)
5. Investigate Land Assembly Options
 - Establish a master plan
 - Carrots and sticks for (in)appropriate development practices
 - City acquires key properties
6. Research Regulatory and Legislative Tools
 - Sustainability ombudsman
 - Low-carbon supportive legislation
 - Build municipal planning policy incentives
 - Upgrade infrastructure as replacement happens
 - Flexible zoning; special development zone
- City Charter
- Eco-density (Brent Toderian)
- Eco-districts (Adam Beck)
- Encourage co-housing, cooperatives and community land trusts.
7. Evaluate Financing Options
 - Mixed zoning tax revenue
 - Development levies
 - Federal and Provincial grants
 - Pension funds; slow money
 - Levies on emissions
 - Municipal bonds
 - Credit Unions
 - Capture a portion of the property value bump for public benefit
 - Talk to and get buy-in from key landowners and developers
8. Develop a new Industrial Model
 - Determine clean and safe industrial uses
 - Assess possibilities for future forms of “clean” industrial cluster
 - Investigate and implement means of creating an “industrial ecology”
 - Establish a BRZ-like organization
9. Education Citizens and Stakeholders
 - Citizen design competition
 - Outreach and engagement
10. Create A Compelling Shared Vision
 - Design charette
 - Establish a local design office
 - Create a Manchester website
 - International design competition
 - Reframe district “New Manchester”

Three Critical Actions

In the final active session teams were asked to produce development scenarios - a prioritized and chronological list of actions (short, medium and long term) needed to move from “The Manchester Project” to realizing the vision of “New Manchester”. Here we present the top three action items to achieve short-term progress – a political champion, a Manchester Project Team, a refined vision and demonstration project development.

The initial obstacle to moving forward involves getting the City of Calgary to admit the Manchester project onto the official planning agenda. So far the city has shown “supportive” interest in the project – including allowing representatives from many city business units and departments to participate in the workshop – but no more.

1. Getting Manchester onto the official agenda requires political action. The number one action recommended by the workshop was to find **a political champion**; someone, or some coalition, to guide the project through the political process of putting the project on the formal planning agenda and into the imagination of Calgarians. In many places such coalitions have been led by active mayors; for example Portland, Oregon; Vancouver B.C.; Copenhagen, Denmark; Curitiba, Brazil; Bogota, Colombia among many others. In other places, such as Freiburg, Germany the champion was a visionary urban professional. Both the inner city industrial lands policy development and the evolving growth management strategy offer opportunities to make the case for Manchester at City Hall. The city’s first action might be to produce a high-level feasibility study to assess the potential of the Manchester Project. An early action to create interest and enthusiasm could be a citizen design competition and/or an international design competition.

2. To support the feasibility study and the vision refinement would require the creation of **a multi-disciplinary, quasi-official office to manage all phases of the Manchester Project**. At the beginning the primary function of the management team would be long term planning and management including finance, partnerships and marketing. A prioritized list of infrastructure needs focusing on the “gateways” – the critical infrastructure that enables subsequent development; for example, a district energy system – would be one of the team’s first deliverables. The Manchester Management Organization should also have a research function as many of the technical, managerial and integrative aspects of the project will need to be developed for the first time.

3. Most participants felt that taking on the development of the entire district was too ambitious and that the district was just ‘too big’. With a champion and a multi-disciplinary team in place a third immediate goal would be to refine **a vision for Manchester and design and implement a sub-district demonstration of pilot project**. The pilot would have three goals: to provide “proof of concept” – to stakeholders, especially the city, property markets and social interests; second provide a learning vehicle for how better to roll-out subsequent development phases (institute adaptive management); and third, to serve as a seedbed for innovation, a place where new conceptions in sustainable urban development are tested, improved, and implemented.

Conclusion

The question of how to redevelop inner-city industrial land is now being addressed in cities around the world including here in Calgary. And, as sustainability is now a primary consideration in the development of urban growth management policy, it makes social, environmental and economic sense to reconsider the present plan for Manchester (there is no plan). Because of its assets land values are already rising in Manchester and redevelopment is occurring. Numerous commercial and office building have already been built and more are in the pipeline. The problem is that while perhaps meeting narrow economic goals potential social and environmental gains are not being captured. Manchester, in fact, is simply reproducing its current auto-dependent, high-carbon form. We believe there is much more value that could be attained if direction and intentionality were applied to the redevelopment already underway.

The Manchester Project, as we have conceived it, steps away from current city growth models. Of the 1.2 million new inhabitants expected to arrive in Calgary by mid-century, the municipal development plan dictates that half be accommodated within the city's existing footprint. To achieve that goal the city has adopted a "node and corridor" strategy where virtually all of the new population will be housed in high density developments along transportation corridors and around transit stations. While we believe this sort of transit-oriented development is sound policy that is based on solid sustainability planning principles we also believe it is insufficient to achieve the 600,000 goal. In mathematics nodes are zero-dimensional objects (points in space), and corridors are one-dimensional objects (lines between points), but two-dimensional solutions that create space for vibrant and diverse communities to emerge must also be on the city's development palette.

In 2013 there is a convergence – a perfect storm – of historical, economic, political, environmental and social circumstances in Calgary that makes sustainable redevelopment in Manchester possible to contemplate. As it is the area presents a once in a lifetime opportunity to achieve multiple social and environmental goals, both individual and societal. The combination of proximity to the core, existing transit, low intensity land uses, lack of NIMBY, the potential for significantly decreased urban carbon emissions and of becoming a world leader in sustainable urban redevelopment are unprecedented. But the window of opportunity is limited. As "status-quo" redevelopment reaches a critical threshold the incentives that make the Manchester Project viable, in all its diversity, will be lost. Waiting ten, or even five years to seize the opportunity may be too long.

Next steps

We would like to connect with individuals interested in participating in the next phase of the Manchester project. Eventually we intend to form a steering committee but for now we would like to hear from you simply if you are interested in being part of future conversations. We will be holding a general informational session(s) in late 2013, details TBA.

Feedback

Feedback is essential for the goal of continuous improvement. Suggestions, criticisms, words of encouragement or any other feedback is welcomed.

Errors and Omissions

If you notice an error or omission please notify us and we will correct the digital version of the report.

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