Optimizing Investments in the Built Environment to Reduce Youth Obesity:
A Study of Decisionmakers in Atlantic Canada

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Acknowledgements

Executive Summary

The purpose of this study is to clarify how decision makers in Atlantic Canada consider youth health in decision-making about the built environment. It will also be used to identify perceived barriers, challenges and opportunities to consider youth health in such decision making. This study is part of a larger project entitled "Optimizing Investments in the Built Environment to Reduce Youth Obesity." The study is funded by the Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research. The principal investigators of the project are Dr. Jill Grant of the Dalhousie University School of Planning and Dr. Renee Lyons of the Atlantic Health Promotion and Research Centre, Dalhousie University.

Youth obesity is rising in Atlantic Canada. Youth healthy lifestyles are on the decline. Research shows that the built environment may affect healthy lifestyle patterns such as physical activity and healthy eating. The research suggests that healthy lifestyles for youth may be facilitated and encouraged through changes in the built environment. Relatively little literature focuses on the relationship between health and the built environment in youth from 12-15 years of age. The published literature on health and the built environment says little about the views that decision makers have on how to better provide built environments to enhance healthy lifestyles for youth. Specific policy and investments recommendations that could be developed to identify ways in which the built environment could be structured to better facilitate youth health have not been fully detailed and need to be researched in greater depth to facilitate progress on implementation.

To collect data on the context of how decision makers view the issue of youth obesity and the solutions they propose to address this problem, three focus groups were conducted, interviewing local practitioners from across Nova Scotia. These groups included health professionals, municipal Councillors, recreation directors, Parks and Trails Coordinators, community developers, school board officials, and planners. We also conducted a professional workshop for planners at the 2008 Atlantic Planners Institute Conference in Charlottetown, Prince Edward Island. The research team presented findings on the relationships between youth obesity and the built environment and then received feedback and information from the workshop participants. The workshop data was analyzed to determine important themes.

The practitioners and decision-makers interviewed during the initial three focus groups generally had a specific interest in the topic of youth obesity. They had knowledge on the topic and suggestions regarding how the built environment could promote healthy lifestyles. Though the planners participating in the focus groups were knowledgeable about the built environment, they were not well informed about the issue of youth obesity. Although focus group practitioners felt that they had a role to play in the issue, the planners were unsure about how they could be integrated into the planning process to best influence youth healthy lifestyles.

Three key themes emerged in the analysis: Knowledge - learning more about youth obesity and its causes and learning from youth; Variety - taking a holistic approach to the problem and providing a range of solutions; and Location and Access - making sure that youth can safely access facilities and healthy lifestyle choices within their communities. The following suggestions were synthesized from the decision makers input from the Focus Group data as themes for action:

Knowledge

- Engage and involve youth in the planning process;
- Collaborate with other disciplines to solve the problem of youth obesity; and
- Work to improve information sharing across departments.

Variety

- Consider healthy eating in planning decisions; and
- Create and implement policies that represent a range of opportunities for youth physical activity.

Location and Access

- Locate schools, recreational facilities and opportunities for more healthy eating choices in accessible community locations;
- Develop policies to support active transportation; and
- Create and implement policies to enhance youth safety.

Planning methods and processes can be used to promote and encourage more healthy lifestyles among youth through the following strategies:

1.) Engage youth in public participation processes to obtain their input and views on defining healthy environments;
2.) Use development standards to encourage density and pedestrian and transit oriented development; and
3.) Create land-use policies that present readily accessible opportunities for youth healthy lifestyles.

The study provides background research on the context of how decision makers in Atlantic Canada view their roles in the creation of built environments that encourage healthy lifestyles for youth. It also provides information on the tools and resources practitioners need to address opportunities, barriers, and challenges associated with youth health and the built environment.

1.0 Youth Obesity and the Built Environment

1.1 Introduction

In Canada, youth obesity is becoming an increasing problem. Youth obesity is on the rise, making this an important time to research causes and solutions to this complex issue. Research has shown that often youth carry lifestyle patterns with them into adulthood which therefore makes this a critical age group to study (Atlantic Health Promotion Research Centre. 2007). Research shows that the built environment directly relates to increasing obesity levels (Papas, et al. 2007). Decision-makers, including planners, must recognize this problem and create investment and policy solutions to promote built environments which are conducive to youth healthy lifestyles. There are many policy changes and investment options available to practitioners. What policy changes can decision-makers make to address the obesity epidemic through changes in the built environment? How can these changes best be implemented? Where should investment be directed in order to have the most significant influence? These are all questions which planners and other practitioners must address if healthy lifestyles for youth are to improve. The research investigates how practitioners and decision-makers view their respective roles on this issue, describing their solutions to the complex problem of youth obesity. Through qualitative study of this topic, I have identified some of the barriers, opportunities, and challenges that decision-makers feel must be considered to positively address the relationship between youth obesity and the built environment.

1.2 Study Background

This project is part of a larger study entitled "Youth Obesity and the Built Environment" undertaken by the Atlantic Health Promotion Research Centre and funded by the Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research. The study is investigating the way that youth use the built environment in order to provide policy and investment recommendations to assist governments in combating the issue of youth obesity. For the purposes of this study, 'youth' are defined as adolescents in grades seven, eight, and nine (twelve to fifteen years of age). The 2006 Canadian Clinical Practice Guidelines define obesity as weight greater than the 95th percentile (McDonald, 2007).

Physical activity levels are on the decline, particularly in Nova Scotia (Campagna, et al, 2005). A national survey conducted in 1997 showed that approximately 72 percent of Nova Scotia residents are not active enough to derive health benefits from physical activity (cited in Curran, et al. 2006). A decline in physical activity and healthy lifestyles are especially visible amongst the youth demographic (Campagna, et al., 2005). This study was motivated by the results of the PACY (Physical Activity Levels and Dietary Intake of Children and Youth in the Province of Nova Scotia) Study which was completed in 2001 and again in 2005. PACY confirmed that only a small percentage of students in grade 7 were getting enough physical activity (Campagna, Ness, Rasmussen, Thompson, Porter, Rehman, 2005). Many of these students' dietary intakes were not meeting those recommended in Canada's Food Guide (Campagna et al, 2005).

In 2007, approximately one in ten Canadian children was classified as obese and an additional quarter of Canadian children were overweight (McDonald, 2007). This is an age group where lifestyle decisions are first made, explored and then often carried by an individual throughout life. This makes this particular age group extremely important point of focus (AHPRC, 2007).

Though there are few controlled studies on the built environment thus far, those that are available state that built infrastructure undoubtedly has a large effect on the lifestyles of those who live within in it (Papas et al.,

2007) Several characteristics of the built environment influence healthy lifestyles. The many ways in which the built environment influences health include not only "direct pathological impacts of various chemical, physical, and biologic agents, but also factors in the broad physical and social environments, which include housing, urban development, land use, transportation, industry, and agriculture" (Deghan, Akhtar-Ganesh, Merchant, 2005 p.28). Automobile-dominated spaces make pedestrians feel secondary and unsafe. Communities that feature a mix of uses and are dense in form are more pedestrian-oriented: they encourage walking instead of automobile travel. These communities usually exhibit greater connectivity as residents can easily access their destination on foot or by transit. Density and mixed-use development also contribute to higher levels of physical activity because they encourage walking and cycling (Handy, Boarnet, Ewing, Killingsworth, 2002). Places that are considered to be conducive to physical activity have access to active modes of transportation and even bus routes. Handy et al. (2002) suggest that people who take transit are likely to get more physical activity than those who drive because they most often walk some distance to get to a transit station.

Literature written on this subject investigates specific design characteristics of built environments which contribute to obesity. Unhealthy lifestyle choices make up a large part of this literature. Sacks et al. conclude that policy directly influences how design choices are made (Sacks, Swinburn, Lawrence, 2008). For instance, adding more designated park spaces to a community helps promote increased physical activity within that community (CABE, 2006.). Pucher and Dykstra (2003) suggest that creating pedestrian-oriented transportation policies help pedestrians to feel more safe and allow them the freedom to walk or bike instead of using a car. Studies suggest including more park and trail system and investigating alternate transportation solutions to address this problem. Park spaces and transportation solutions are two main topics that are explored in the literature on this topic (Pollard, 2003).

Several papers suggest that a multi-disciplinary approach is needed in creating solutions to the problem of obesity. Research studies conclude that the built environment plays a role in obesity, but that it is one part of a larger, very complex issue (Papas et al., 2007). Because of the broad policy implications more policy research must be completed on this subject (Schmid, Pratt, Witmer, 2006.).

Specific recommendations regarding policy changes governments should make were not identified in my review of the literature. For example, the articles discussing the importance of adding park spaces to communities to help encourage physical activity did not state how much park space is needed to facilitate change. Though transportation policy measures outlined in the literature are more detailed, they do not specifically identify methods by which municipalities can work with their existing infrastructure to create positive change. In most Canadian cities, for example, snowplows are a reality. Where the snow is deposited and stored has a significant impact on how people can use the built environment during the winter months. Issues such as this one do not appear to have been investigated to any great extent in literature on planning policy thus far. Though Zenzola (2003) argues that multi-disciplinary partnerships are essential in solving the issues related to health and the built environment, I found no policy recommendations to facilitate these partnerships. Planners and health professionals need to work together to create a built environment conducive to activity (Frank et al., 2004). However, there is no specific framework to suggest how this should occur in order to make the best possible changes happen (Swinburn, 2008). Policy recommendations may provide communities with research-based options they can try to address the obesity epidemic.

For the purposes of our study, youth have been defined as those in Grades 7, 8 and 9 (typically ages 12 to 15). Research within this field often focuses on groups with specific needs such as children (under 12 years) or senior citizens. However, I found little research to suggest how the built environment should be structured in order for youth to participate. Youth have very specific needs such as spaces in which they can socialize in groups (Krizek, Birnbaum, Levinson, 2004). They are somewhat independent and beyond needing continuous adult supervision in most cases (O'Brien, Jones, Sloan, Rustin, 2000). However, they are limited to spending time in areas generally

within close proximity to where they live as they cannot yet drive (Cohen et al., 2006). Youth spend much of their time with their own social circle and therefore need spaces where they can gather informally to interact and participate in the recreational activities of interest to their particular group. Youth may not be welcome in many gathering spaces, with authorities not allowing youth to use available public space in some cases (often due to community, safety or liability concerns). Papas et al. (2007 p.12) state, "Adolescence is a critical life period marked by rapid growth and development, and it is typically characterized by an increasing need for autonomy and a desire to make lifestyle choices that conform to peer norms. As adolescents begin to explore the environment around them independently of parental influences, the impact of the built environment may be a strong determinant in influencing behaviors regarding physical activity and diet." Research needs to study how youth can be engaged in the planning process in order to create built environments which support their recreation and lifestyle needs.

Literature on the topic of health and the built environment makes no suggestion as to where investments should be made to facilitate healthy environments. Those looking for advice on how to spend government dollars in building healthy spaces find little guidance in the literature. For example, would it be best to invest in modes of active transportation, or would it be best to focus funding on the creation of plans which facilitate mixed-use environments? In 2005, the Nova Scotia Government allocated $500,000 in physical activity grants to communities within the Province for projects aimed at increasing physical activity levels (CFLRI, 2005). However, communities received no recommendations or guidelines as to what types of projects would contribute most to increasing physical activity (CFLRI, 2005). With many options where practitioners and decision-makers can allocate funds, it would be helpful for the practitioners and decision-makers to have information on where such funding could be most effectively spent.

Decision-makers and the context in which they consider the issue of youth obesity must be researched in order to examine if this issue is a priority. Practitioners and decision-makers may potentially have an impact on reducing youth obesity through the policies they develop and successfully implement, and the investments they decide to make. In order to consider strategies for resolving the problem of youth obesity, we need to understand how practitioners and decision-makers view their roles in the problem. Do the practitioners and decision-makers believe they have an important role to play in addressing youth obesity? What barriers or challenges do they see associated with trying to combat the issue? What opportunities do they see when trying to facilitate healthy lifestyles for youth? Understanding the views of practitioners and decision-makers will help clarify the priorities and processes that could be implemented to reduce youth obesity. Politicians, health practitioners, school board officials, recreation directors, parks and trails co-ordinators, engineers, planners, landscape architects, urban designers, and town managers all have some influence on the built environment and how it might encourage or discourage youth obesity. Discussing the issue with them will help to not only clarify where they stand on the issue of youth obesity but will also allow them to participate in a valuable discussion which will contribute to research on this topic.

My research project examines the context of how decision-makers in Atlantic Canada consider youth health in decision-making about the built environment. It will identify perceived barriers, challenges and opportunities to consider youth health in such decision-making.

1.3 Statement of Purpose

In order to begin my research, I developed a research question to direct data collection initiatives: What specific recommendations about policy and investments do decision-makers feel need to be made to guide the design of built environments that support healthy lifestyles for youth?

Four objectives guided the research:

1. Attempt to understand the relationship between policies affecting the built form and "obesogenic" environments.

In April 2008, I completed a policy scan that I began in January 2008. To understand the relationship between policies affecting the built form and "obesogenic" environments, I investigated how various policies could contribute to proper dietary intake and physical activity levels of youth, particularly within Halifax Regional Municipality (HRM). A review of the literature also contributed to understanding this objective. I collected and scanned literature from various sources to gain specific understanding of the various aspects of the built environment that affect obesity levels. Much of the research collected suggested the benefits of walkability, mixed-use zoning, pedestrian-oriented development, transit-oriented development, and the importance of active modes of transportation such as cycling. Policy suggestions included the creation of more park spaces and trails.

2. Determine how policy in Atlantic Canada helps or hinders healthy lifestyles for youth.

To establish the nature of policy in Atlantic Canada, I needed to understand its effect on the built environment. During the policy scan, I looked for policies within HRM that contributed to a built environment which had a negative effect(s) on healthy lifestyles. School board bussing policies were investigated. HRM buses students who live 1.5km or more from school. Bussing contributes to lower daily levels of exercise for these youth overall. I investigated the HRM Municipal Planning Strategy to see if/how it addresses healthy lifestyles for youth. I concluded that this document said little about youth physical activity.

In order to gain a further understanding of the nature of policy in Atlantic Canada, I asked focus groups of local policy makers about specific barriers and opportunities created by policy.

3. Find out what policy and decision-makers need to facilitate policy creation which will effectively promote youth healthy lifestyles in the future.

Literature was scanned to discover how practitioners view this issue and how they are working to solve it. As little previous research was identified focusing on the role of practitioners and decision-makers, I determined that original data collection was necessary to meet this objective. Decision-makers were asked what tools could effectively help them to create healthy environments for youth. We wanted to establish what decision-makers needed to know and how they viewed their role in addressing youth obesity through changes in the built environment. The conclusions and recommendations derived from this element of the study helped to clarify this objective.

4. Establish what recommendations practitioners have for solving the issue of youth obesity.

I analyzed data in order to establish the main themes that decision-makers felt were crucial for dealing with youth obesity. The recommendations suggest outcomes that planners can use to modify and create policy to improve healthy lifestyles for youth. There are eight recommendations in total. The subject matter covered in each specific recommendation was addressed during both the focus groups and the planners' workshop. The recommendations chosen were those most important to the decision-makers consulted.

1.4 Research Method

I undertook a policy scan in January 2008 to identify policies that potentially have a direct effect on youth in Atlantic Canada. I then analyzed how these policies contribute to the development of built environments that have barriers to physical activity and healthy lifestyle choices. With many policies that could be studied, I focused the scan on those directly related to Halifax Regional Municipality (HRM). During the scan, I examined school board bussing policies, the HRM Municipal Planning Strategy, and HRM's Physical Activity Strategy. As a result of this initial policy scan, the research coordinators determined that additional, more detailed policy research would be useful to the overall study goals and objectives; this is now being continued by Post-Doctoral Fellow Tara-Leigh McHugh, as part of the Atlantic Health Promotion and Research Centre.

Before the focus groups were designed, I completed a literature review. Though health and the built environment had been researched, how youth obesity was impacted by the built environment has not been directly researched. My review suggested that practitioners' views on this issue have not been the focus of research conducted on this subject. It also uncovered a need for research regarding where direct investments can be made to the built environment to reduce youth obesity. After the literature review, it became clear that the focus groups would need to focus on researching:

1.) How do decision-makers in Atlantic Canada consider youth health in decision-making regarding the built environment?

2.) What barriers, challenges, and opportunities do decision-makers in Atlantic Canada face when considering improving healthy lifestyles for youth?

I wanted to find out where they felt investment priorities should be focused. It was important to gain an understanding regarding which policies they felt were effective and which ones they felt needed to be created or added in order to have an impact on youth obesity. We developed the following questions for the focus groups:

1.) What role does your agency (place of employment) play in decisions about the built environment?

2.) What role does your agency play in engaging youth in healthy living (e.g. healthy eating choices and physical activity)? Can you give some examples?

3.) I mentioned some of the health concerns associated with youth in Nova Scotia. How do these health concerns affect decisions your agency makes?

4.) How receptive are policy and decision-makers in your agency to incorporate health considerations into decision making?

5.) Do you work with other groups on planning for the built environment and youth health? Can you give some examples?

6.) What do you see as the biggest barriers to youth health/healthy eating/physical activity in your area?

7.) What do you see as the biggest opportunities to youth health/ healthy eating/ physical activity in your area?

8.) What do you think are specific things your agency (with others) is currently trying to do to improve youth health through the built environment?

9.) What do you think are specific things your agency (with others) can do to improve youth health through the built environment?

10.) What do you (on behalf of your agency) think is the most significant thing you can do within the mandate of your agency to foster a built environment that supports healthy living (especially one that supports healthy lifestyle choices among youth)?

To obtain qualitative data on youth health and the built environment, I took a two- staged approach to collecting information. The first stage of data collection involved organization and completion of three Focus Groups. Focus Groups provide the opportunity to interview six to eight people at the same time. Focus Groups are an effective way to obtain information from decision-makers because they promote group discussion and information exchange. I used the information that I collected during my literature review to develop the questions I put to each of the Focus Groups. The questions focused on the role decision-makers play in solving the issue of youth obesity and what helps them or hinders them in this process. I contacted decision-makers and practitioners including councillors, municipal recreation employees, landscape architects, urban designers, engineers and school board and public health officials from the HRM and Nova Scotia area to participate. I selected participants to represent a broad range of decision-makers, (including males and females) and those representing rural, urban, and suburban communities across Nova Scotia. Potential participants were invited by email and telephone. I aimed to have six to eight participants for each group.

A Focus Group Pilot Session was initially held involving a volunteer group of four decision-makers who worked in municipal government. I asked them my questions and they gave me feedback during the Pilot Session to help with the overall Focus Group development. The participants were each asked to provide comments on the questions posed, the results of which were synthesized and used to refine the questions and format for subsequent sessions.

The second focus group took place on July 29, 2008 in Antigonish, Nova Scotia, with a total of eight participants. The third took place on July 31, 2008 in Lower Sackville, to which four participants attended. Locations were selected because they are centrally located and accessible, and allowed for a broad range of participants representing the major decision-makers.

Although I was able to get enough participants to complete the study, the groups were not as representative as we had hoped. No municipal engineers attended any of the Focus Groups. Some of those contacted responded that they did not have any direct experience with the subject matter and therefore would not be the best choice for the study. Additionally, due to the fact that all of the Focus Group meetings were convened in July, many of those initially contacted were unable to participate as they were on vacation during the time period allotted for the Focus Group discussions.

All feedback obtained during the Focus Group discussions was recorded and transcribed. Prior to proceeding

with the each Focus Group, participants signed a waiver confirming their permission and indicating that they were comfortable with being recorded. The Focus Group meetings were set up in a question and discussion format. The data was synthesized, with the responses analyzed for trends and themes.

To collect qualitative information from planners, a second component workshop was organized and convened in October 2008 at the Atlantic Planners Institute (API) Annual Conference, held in Charlottetown, Prince Edward Island. Jill Grant, Patricia Manuel, and I organized a Workshop entitled "Youth Health and the Built Environment". The Workshop was approximately three hours in length and provided an excellent opportunity for information exchange and discussions with practitioners. Participants were given a package of information about the study and the research data collected from the Focus Group Study.

The API Conference Workshop was divided into three sections. The first section of the Workshop included three informative presentations. The main focus for this section of the Workshop involved delivering what the research team had learned about youth obesity and the built environment to practitioners. I presented the results obtained from the Focus Groups and explained the state of youth obesity through a brief summary of some of the PACY study findings. Dr. Jill Grant presented an overview of the "Built Environment and Youth Obesity" study to give participants an understanding of the nature of how the built environment may affect healthy lifestyle choices for this age group. Patricia Manuel presented information on 'third places' for youth to explain to practitioners what types of spaces are conducive to youth.

The second phase of the API Conference Workshop focused on trying to identify specific policy and planning interventions that represent viable strategies for optimizing government investments in the built environment. Data analysis from the earlier Focus Groups indicated that specific policy and investment priorities were not talked about in enough detail during the Focus Group sessions, so that we identified a need for additional focus on this during the API Conference Workshop. The Workshop participants participated in group discussions to examine the role that planners play in creating healthy built environments for youth. The 32 workshop participants were divided into four groups of eight.

After reviewing the Focus Group results, I felt that the data collected did not adequately focus directly on policy changes and the tools and resources decision-makers need to begin to make changes. I knew this information would be important to study in order to understand how decision-makers view the issue of youth obesity. For example, I wanted to know which types of policies decision-makers felt could be changed to have a positive effect on youth health lifestyles. I knew that the questions asked at the API workshop during the focus group sessions could help to uncover answers such at this. I therefore made sure to ask questions which were directly related to policy and what kinds of information planners needed to begin to impact this issue. We asked the following questions at the API conference workshop:

1. What is your (or your agency's) role in creating physical or built environments that support healthy living, especially among youth?

2. In what ways do the physical (built) environments of your jurisdiction (Municipality, province) support healthy living and in particular healthy lifestyle choices among youth? In what ways do they undermine healthy living?

3. What policies or programs available to you (and your jurisdiction) help communities choose to invest in health-supporting improvements to the built environment and especially those of relevance to youth?

4. What are the biggest changes needed in your jurisdiction to facilitate these environments?

5. What challenges do you (or your agency) face in trying to implement changes such as these?

6. What kind of policy, regulatory, or administrative changes in your jurisdiction would make it easier to build communities that support healthy living and especially one that supports healthy lifestyle choices among youth?

7. What tools and resources would be helpful to local decision-makers in facilitating a built environment that supports healthy living and especially one that supports healthy lifestyle choices among youth?

8. What initiatives could planners take to promote better decision making about investments in the built environment?

 The four Workshop discussion groups were recorded and the results of this session transcribed and then analyzed. Then, a comparative analysis was completed to identify similarities and differences with the previous Focus Group and API Conference Workshop group discussion data.

2.0 Focus Group Data Analysis and Results

2.1 Data Analysis

 To analyze the Focus Group and API Workshop Conference data, I first transcribed all of the sessions. I read through the focus group transcripts to identify repetitive subject matter discussed within the sessions. After I had identified all of the various subjects practitioners addressed within the transcripts, I then grouped this information into themes. For example, I grouped all of the commentary on youth participation and ownership into one category entitled 'Youth Engagement'. After all of the themes within the data were identified, I then determined which were discussed most frequently and hence were the most relevant to the research study. These themes were then conveyed as ideas on how decision-makers can best facilitate planning, design and construction of built environments conducive to youth healthy lifestyles. The ideas were presented during the API Conference Workshop to inform participants of the Focus Group content.

 In total, sixteen participants attended the three focus groups. An equal number of males and females participated. More participants were from a rural setting, than urban.

Table 1. Focus Group Participants

Participant Occupation	Gender	Rural or Urban
Municipality Focus Group		
Senior Planner	M	Urban
Community Developer	M	Urban
Planner	F	Urban
Transportation Demand Management Coordinator	F	Urban
Focus Group held in Antigonish		
Director of Recreation	M	Rural

Parks and Trails Coordinator	F	Rural
Councillor	M	Rural
Councillor	F	Rural
Community Health Board Chair	F	Rural
District Health Authority Vice-Chair	M	Rural
School Board Director of Programs	M	Rural
School Board Member	F	Rural
Focus Group held in Sackville		
Trails Coordinator	F	Rural
Parks and Trails Coordinator	M	Rural
Community School Coordinator	M	Rural
Community Health Board Coordinator	F	Urban

2.2 How do Focus Group Practitioners View their Roles?

The focus groups were composed of a variety of practitioners. These included planners, school board members and staff, recreation coordinators, town councillors, health board members and employees, and parks and trails co-ordinators. These practitioners made decisions connected to the built environment at a range of levels. School board and health board officials advise boards on policy. Councillors approve municipal land-use decisions which include the placement of schools and healthy eating choices. Recreation directors developed programming and Park and Trails Co-ordinators developed policy with their municipalities. Planners write policy, plans, and by-laws which, if approved, direct investments and how the built environment is structured.

The first focus group featured three planners and one community development officer. The second featured two councillors, one recreation coordinator, two school board representatives, one parks and trails coordinator, and two health board representatives. The third focus group featured two recreation coordinators, one community health board representative and one parks and trails coordinator. Those practitioners who attended the focus groups were all personally interested in the topic matter presented. Some had previously worked with youth on similar projects and some were coming to learn more because they felt it was important. Though many were interested and involved in various projects concerning healthy lifestyles, some admitted that youth were not the focus of their work. For example, one focus group participant said that although there was lots of programming for children and adults, there was a gap when it came to youth programming. This participant felt that being part of the focus group discussion had allowed her to realize that this gap existed within recreational programming. Many of the focus group participants were looking to the focus group discussion to help them discover solutions to the problem of youth obesity that they could take back with them to their municipality or agency. All participants felt that they had a role to play in the issue. One focus group participant noted, "youth obesity is everybody's problem," and the entire focus group agreed with this statement.

2.3 Focus Group Data Analysis Results

Below are the main themes present in the data. They represent the ideas that the practitioners and decision-makers involved in the data collection felt were most important to address through policy changes and investment prioritization. Analysis of these themes has been crucial in understanding how decision makers view their role in the issue and their perceived solutions to the problem of youth obesity.

Table 2.

Main Themes present in the Focus Group Data
•   A lack of focus on healthy eating •   Transportation issues •   Location and siting of schools •   Youth engagement •   Non-traditional activity •   Taking an interdisciplinary approach to the issue of youth obesity. •   Safety •   Interdepartmental silos

Healthy Eating

The focus group data illustrates that although physical activity was often taken into consideration, decision makers do not focus on healthy eating to the same extent. Physical activity was discussed at greater length during all of the focus group sessions. Most of the practitioners admitted to a lack of focus on healthy eating and its contribution to youth healthy lifestyles. During the Halifax Regional Municipality focus group, one participant stated, "we don't deal with the 'fish and chips' factor much." Though many focus group participants acknowledged that unhealthy foods had been removed from schools many also acknowledged that more should be done to address the issue of healthy eating. For example, one participant admitted, "we are not into the healthy eating department as much as maybe we should or could be. And basically it's more the physical living than the eating." Another admitted that although healthy eating was going to be looked at in the future, it was not yet being considered, "We haven't really touched on the healthy eating so much yet. It's coming down the pipe."

One focus group participant acknowledged that it was far too easy for youth to have access to unhealthy options, "The fast food industry. I mean that's what they do and there's one on every corner. It's accessible. It's more accessible than healthy eating. People can leave and go to the grocery store but everything is the convenience store or a Tim Horton's or whatever is available. Fresh produce is not necessarily available so I think marketing fast food and all the access to that is huge." Another agreed, "It's not so much fast food but convenience food that would be the better term."

During the same focus group participants noted that youth often work in the fast food sector. When youth work in the industry they have easy access to unhealthy food options. One focus group participant commented, "I worked in a fast food restaurant and I know that you don't bring in a peanut butter sandwich. You don't bring in a salad. You eat there everyday that you're there."

Focus group participants acknowledged that food costs were higher for healthy choices and that this was a problem. One professional acknowledged, "I think we as professionals have to, on a daily basis, if not, weekly basis, be cognizant and aware of what's out there. What healthy choices are available that we can access and from that we have the processes to go ahead and get them done."

Location and Access of Opportunities

For youth, the accessibility of healthy food choices and physical activity is very important. They are not old enough to drive and so all of their healthy lifestyle opportunities must be accessible by foot. This was a major point that was addressed during data collection by focus group participants.

Schools are a part of the built environment that provide many opportunities for youth. Unfortunately youth do not always have access to school facilities after hours. Students bussed to school may have no way of staying after school or returning to school to participate in activity during the evening hours. One focus group participant admitted, "the community use of schools has been a long-term issue for us as a board. There's not a great deal of time available for community use. I think we have to start looking at facilities and being very creative in communities with regards to facilities." Another admitted, "When the kids leave on the school bus it's very hard to get them back. It's almost impossible. Unless the parents bring the kids back, the kids aren't coming back. In the school program we do after school, if the program is right after school, I get tremendous numbers but sometimes because of accessibility to the gym I may have to do the program at six o'clock. And then the numbers drop dramatically."

The placement of schools is also a problem. One focus group participant felt that the design of schools had a lot of influence on how communities were built. He explained, "In the last thirty or forty years schools have tended to be designed- well, I guess we can call them big box schools. They tend to be designed like a cross between a prison and a shopping mall. And they're usually placed in a very isolated location, accessible only by car where the province happens to own some land."

Access to other facilities is also limited. The data collected from the focus groups reflects that practitioners are aware of this. Many opportunities for physical activity are located in places which is it hard for youth to access them. One focus group participant stressed, "there's so many agencies and centres out there for our children. We just need to get them there." Another stated, "You can have all the programs and facilities that you want but if the kids have no way to get there then you're stuck." Another agreed, "if we have programs and we can't get our kids or our youth or adults there then it's a problem." This topic was expanded on when one participant commented, "In the wintertime if you want to go swimming in a pool then you either have to go to Halifax or Yarmouth. There is absolutely nothing in between."

Focus group participants agreed that one issue associated with access to facilities is safety. Many youth do not feel safe using various facilities. For example, one focus group participant explained that youth felt safe using the provided trails to get to school but they felt unsafe using it later in the day because they feared they might get attacked. Practitioners acknowledged that children felt unsafe cycling and walking and that this would need to be addressed.

As youth cannot drive, there must be opportunities for them to use active modes of transportation to get to facilities and places where they can access healthy food choices. Practitioners said that is was important to study safe modes of active transportation in order to promote healthy lifestyles for youth. One focus group participant felt that, "the link to physical fitness- is with being able to turn people's daily routine into a fitness opportunity."

Interdepartmental Silos

During the data collection, practitioners often focused on the topic of interdepartmental disconnectedness. In order to really solve the issue of youth obesity, respondents said departments would have to have more communication. Practitioners who participated in the focus groups felt that municipalities, the province, and the federal govern-

ment had distinct roles. For example, one participant commented, "health is not a core function of the municipality. I think it needs to be emphasized. The province just can't download everything onto the municipalities although they try sometimes." The same participant noted, "I guess it depends on who you speak to and to what government and it gets very very frustrating. I wish there was more consistency with the DMs right across the provincial departments so that everyone will be on the same page." Another commented, "honestly, I think there should be more of what we are actually doing here today. Because what happens is it brings awareness. We need to get to the provincial and federal levels to promote this with some funding."

One focus group participant was optimistic about decreasing interdepartmental silos, "I think there's opportunity because to have some leadership in certain government departments provincially here and federally also but to have policies that are consistent across the board and then effort and support, including financial support that reflects those policies. The example of the Department of Transportation lagging behind some other departments. They really need to catch up because they're not going to have much fun if they don't. I see glimpses of where they are making progress but that's just one example that comes to mind where the opportunity is here and we need everyone to jump on board with the big goal in mind, the big picture in mind."

Another participant saw the opportunities aligned with decreasing interdepartmental silos, "another thing I would suggest is that we should try to mitigate these interdepartmental silos that we have at the government level. Sometimes different departments are offering grants and monies but really they could probably optimize that if we did get together."

Youth Participation and Ownership

Youth in our society are an age group which has little rights as citizens. They are close to adulthood but they are too young to vote. Often their opinions are not heard. One consistent theme that arose during the focus groups and workshop discussion involved youth participation and ownership. One focus group participant commented on our study by saying, "I heard someone mention earlier that you are going to ask the kids and youth. I think that's so crucial. Why don't we ask them the questions as to why they're not as active as we would like to see them or as they need to be? What are the obstacles that they see?"

Practitioners admitted that youth must be part of the planning process. One focus group participant stated, "If there is a project for youth, it doesn't make any sense for us as policy makers to sit in an office and decide what it should look like and how much money we should spend and those kinds of things. You have to have the youth involved." Another agreed by saying, "From my experience, youth are looking for opportunities for meaningful contribution in the community. They're looking to be included and what that meaningful contribution means can mean different things to different youth." The importance of youth participation was consistently agreed upon at several points during the focus groups. Involving youth in the planning process would help to give them a voice which would foster the idea that when it comes to built environment project geared towards youth, "ultimately, the youth will take ownership."

Though focus group members agreed that it was crucial to have youth involved in the planning process, participants generally acknowledged that it was very difficult to get youth involved in engage them in planning decisions. Decision-makers found it hard to draw large numbers of youth when they attempted to include them in these decisions.

Most of the decision makers were optimistic about the process of youth engagement and employing new ideas

to make this happen. One focus group participant noticed that youth were not participating so attempted to try to gain an understanding of why youth were difficult to engage, "What I did was I hired a consultant to come up with questions. I went to every classroom and every school in my municipality and I handed out the questions. I got all this data back that I then processed. If you really want to do it, you can do it." When asked about the most significant things decision makers can do to facilitate healthy environments for youth, another stressed the importance of creating a welcoming environment to encourage youth to participate, "I think the two biggest areas are providing youth an avenue for their voice and also avenues for youth to be involved- finding innovative ways to get the information out to youth about what is potentially out there that they could be involved in and also giving them an opportunity to actually get involved themselves in perhaps organizing and contributing to their community."

Interdisciplinary Partnerships

Many departments and practitioners work towards solving youth obesity. Focus group and workshop discussion data shows that most of the decision makers involved thought that taking a more multi-disciplinary approach to dealing with youth health would significantly solve the problem. Many participants felt that multi-disciplinary partnerships needed to be strengthened. One commented that although efforts were made to develop those partnerships there was "no overall strategy." Another commented on the idea of partnering with other decision makers by noting that there were so many people you could learn from that, "you'd almost be foolish not to."

Practitioners involved in the focus groups felt that these partnerships were important. One commented, "we're constantly partnering on the built environment." One group commented on the fact that meeting for the focus group discussion was an opportunity. A participant explained, "I think that after this session today it's very important that we share information." Most of the focus group participants were optimistic about developing partnerships. One was excited about the possibilities, "Let's talk about how we can partner. How we can work and collaborate together and start a new path. Embrace health in a whole different way."

Non-Traditional Opportunities

Many of the physical activity opportunities within the built environment that exist for youth are geared towards traditional sporting activities. For example, arenas were mentioned at various points during the focus group discussions. Traditional sports such as hockey, baseball, soccer, and football are physical activities that youth participate in. However, not all youth prefer these activities and many others participate in other non-traditional forms of activity such as walking, hiking, cycling, skateboarding and swimming. The focus group participants mentioned that there should be more opportunities within the built environment for youth who would prefer to participate in non-traditional types of physical activity. One participant suggested, "If we can promote putting a variety of different types of infrastructure within community reach- trails, hard-surface play areas- you have to provide that variety." He also mentioned the following point, "It's the team sports. They look after a certain percentage of children and youth but we have to continue to go back to the kids and the youth and ask them what they'd like to see in an intramural program or an after school program or community program because they're not going to do it unless they enjoy it so the more that we can offer them other than the traditional sports teams- that's the kind of area that we have to get into."

Non-traditional activities provide inexpensive opportunities for youth. One participant mentioned that youth have a large effect on the range of programs offered, "…..whatever the kids want, they can bump into the system. In this particular municipality youth wanted fencing lessons and that was provided through the school system. Another participant commented on one youth in her community and his use of non-traditional forms of activity. Referring to the youth, she explained, "…he operates a dirt bike legally on the trails but he also runs every day on the trails and if that opportunity for him to use his own OHV- which is one part of his life- were taken away from him

then I think it would change very much his perspective on how he uses what kind of facilities. Therefore, he would feel detached and alienated from his community if he didn't have that available to him. It's very hard for me in the position that I'm in to try and get that across sometimes. That excluding one use doesn't make everybody all of a sudden come to a facility. Everything in moderation. It can all be accommodated. One doesn't preclude the other in my community."

Transportation

Transportation, in particular, active transportation was a focus of the discussion. Many of the practitioners felt that that there is an inadequate amount of transportation infrastructure. For example, one participant commented, "Sidewalks are a really big issue. We are talking active transportation and a lot of us are involved with that. Outside of the trails which are a wonderful system but if you don't happen to live close to that trail and you are in a community, a lot of our rural roads are not great. The traffic is heavy and you've got huge trucks barreling by so as a parent are you going to let your child walk or drive their bike along these busy highways? They are very reluctant to do that so sidewalks are a really big issue in Nova Scotia."

Another participant added that often municipalities do not have the budget to maintain roads in the way that they should. Another echoed that, "It's a bit of a barrier or can be especially in rural municipalities like ours. Access to safe areas to be active."

Practitioners felt that there were not enough opportunities for active transportation in general. Walkability was a very important issue for those who participated in the focus groups. One participant stated, "We deal very much with car dependency, which is a problem across the population. It's a behaviour or lifestyle that's learned when people are young, so we very much have in our minds and in just about everything we do, how we can make this community and this proposal in such a way that it makes it easy and even preferable for people to walk and it's very difficult because we are up against incredible institutional barriers both within the municipality and with other levels of government and within the development and banking industry. Everything is geared towards the car."

One participant was hopeful that opportunities for renewal of transportation infrastructure would arise, "At this point, the Department of Transportation and Infrastructure Renewal, they do not have a trails mandate or a community mandate. Their mandate is to develop and maintain roadways to allow people safe travel. So when they're approached by community members or groups or recreation departments or Capital Health Boards saying, "we need some routes that incorporate your roadways or a portion of your right-of-way," there's no opportunities for them to partner but I think that's changing. It's changing very slowly."

2.4 Focus Group Conclusions

Practitioners who participated in the focus groups all felt strongly that the study of youth obesity and the built environment is important. They genuinely wanted to learn more about how they could help solve the problem of youth obesity. I used the focus group results to develop seven best practice suggestions for planners and practitioners based on the themes present in the focus group transcripts.

Table 3.

Best Practice Suggestions Gained from Focus Group Data
1.)   Engage and involve youth in the planning process.
2.)   Locate schools and facilities in accessible, central community locations.
3.)   Create and implement planning policy which represents a range of opportunities for youth physical activity.
4.)   Develop policy to support active transportation.
5.)   Take a leadership role in collaborating with other sectors to address the issue of youth obesity.
6.)   Create and implement policy to increase safety for youth.
7.)   Consider healthy eating choices in planning decisions.

Though the data collected helped to suggest best practice priorities for this project, I found that specific policy and investment suggestions were not included in the discussion as much as I had initially anticipated they would be. Knowing that this information was imperative to my study, I wanted to make sure that the API Practitioners workshop would address this gap. I tried to select questions that would allow me to gather data on policy and investment specifics related to youth healthy lifestyles and the built environment.

3.0 Atlantic Planners Institute Conference Workshop Analysis and Results

3.1 How do API Workshop Practitioners view their role in youth health?

At the API conference workshop many of the planners involved were learning about this issue for the first time. Many of the planners said that the workshop helped them to think about a subject which was totally new to them and changed the way that they viewed the issue of youth obesity. Planners are responsible for drafting policies which are presented to municipal councils. They are also responsible for making decisions regarding engagement processes; who has input into the formation of land use policy, plans, developments and by-laws and the type of input will this include.

Many felt that they did not deal with youth health at all in their daily work. For example, one focus group practitioner stated, "I don't see that there's a large role in what I do day to day in creating built environments that support a healthy lifestyle. Although it could factor into any decision-making, it doesn't really." Others said that their involvement with the issue was non-direct. One planner felt that "municipalities, in our case, don't see us as playing that critical role." They were already dealing with many issues within their daily professional lives such as trying to accommodate the public and dealing with various stakeholders. The youth demographic seemed to be left out of most of the work that they had seen accomplished.

In many cases, the planners did not feel that they were decision-makers (at many points during the focus group discussions the planners would refer to decision-makers as if they themselves were not decision-makers.) One participant even stated, "We're not the decision-makers. We know who the decision-makers are. Are they tuned into it?"

During the focus groups, it was noted that those who worked in municipal offices felt that they could have less impact on the issue of youth obesity than those who worked for consulting firms. Some of the consultants interviewed expressed that because they work in various communities instead of just one, they were able to share new ideas with several communities. Municipal workers felt that they were at the whim of councillors and political decision-makers. They felt that, ultimately, the decisions were made at a political level, and not by municipal plan-

ners. This illustrates that this group feels disempowered and that their recommendations are often not listened to. The analysis of focus group and workshop discussion data concludes that the issue of youth obesity and the built environment is not currently a consideration that planners focus on. Many of the planners interviewed seemed disheartened by the fact that they were unable to accomplish more given the limits that were placed on them regularly. The data collected points to the fact that if the issue of youth obesity is going to be solved, then more attention must be called to the issue so that it will become more of a priority for political leaders and practitioners. Because many planners do not have a thorough understanding of the importance of the problem of youth obesity, more education could constitute bringing more attention to youth health. Youth obesity will need to be addressed by policy and investment, but it will need to become an important priority before it can be addressed. There are many initiatives that planners can take in order to help solve youth obesity. Planners need to be made aware that they play a crucial role in the creation of built environments that facilitate healthy lifestyle, in particular for youth.

Table 4.

Main themes present in the API Workshop Discussion Groups
• A lack of focus on healthy eating
• Active transportation
• Location and siting of schools
• Youth engagement
• Car dependency and the importance of walkability
• Non-traditional activity
• Taking an interdisciplinary approach to this issue.
• Transportation Infrastructure
• Safety
• Interdepartmental silos
• Lack of information about the issue of youth obesity.
• Feeling that there are significant barriers of challenges standing in the way of changing youth obesity.

3.2 API Workshop Group Results

Healthy Eating

As with the data collected during the mixed focus groups, planners discussed healthy eating choices less than physical activity. During one particular focus group, one participant mentioned that eating was not prioritized enough by saying, "I can remember years ago that the there was a big concern about video arcades being built or developed in the neighbourhood service centres too close to the schools. They were concerned that the kids were going to be dealing drugs and whatever else but I don't think anybody really thought about where fast food outlets are located related to where the kids are and just how accessible fast food is to the kids." While some mentioned that there had been efforts made to keep fast food away from the local high schools in their communities, overall, there was little conversation oriented towards healthy eating choices.

Location and Access of Opportunities

The focus group practitioners acknowledged that location and siting of schools and facilities was an important component of the youth obesity epidemic and the API conference workshop participants had similar views. One participant noted, "We are losing the schools and this is really outside of our control. It's really a planning issue. We

should have influence over the school board or maybe just the general province to present this vision of a healthy community and one that kids can walk. Because everybody is saying that kids cannot be active because they cannot walk to school. Because right now the schools are much bigger and they are located in a strategic location next to the highway and far away and so on. All these small community schools- one, after another, two to three a year are closed and converted into residential developments or something."

Another participant agreed and shared a similar story, "I think one of the worst decisions that was made in our area was about six years ago when they built two new regional high schools and they ended up closing down some of the local high schools within the towns and the two big super schools were built on the outskirts. One on the edge of the industrial park and another one out in the rural municipality so in both cases now kids are bussed or driven to the school. I think a lot of activity that youth can get is on their way back and forth to school. Not just as they are walking from home to school but to the store that they hang out in, to the field that they hang out in. It's like your presentation was showing earlier. But I think that we're going in the completely wrong direction by building these regional schools way out on the periphery or beyond so the ability to get passive recreation doesn't even exist."

Another participant echoed these statements, "The city had originally one high school which was on the south side of the river and so a second high school was on the north side. Way out. They had to build roads to get to it because it was so far out and not close to anything. So again, you're creating a situation where trying to lessen the bussing from all over the city and surrounding area, but then they build a school which is even more inaccessible so kids have to be bussed there. Makes no sense."

Interdepartmental Silos

The API workshop participants identified a disconnect between the municipal, provincial, and federal governments that makes it difficult to tackle many issues, including the issue of youth obesity. One participant explained, "Very frequently you will find that not all departments share the same vision as to how these goals should be reached in terms of what's desirable for types and locations of open space for example, or where recreation facilities of certain types should be located."

Another participant felt that better integration was needed to help alleviate interdepartmental silos, "I think the biggest change we need within our jurisdiction would be first to start out with better integration of transportation planning and land use planning because we don't really have people for our transportation commission sitting at the table with the planning committee meeting once a month just so they have a clear indication of what demands are being placed on the infrastructure they're responsible for providing and they can communicate what their budgetary constraints are and their ability.

Another planner commented, "I'm always struck by not only the way that the government downloads responsibility to the municipalities but the lack of communication between government departments."

One planner felt that these silos had a negative effect on how municipalities worked on the problem of youth obesity. He said that the provincial government needed to consider, "how much of an effect too, the senior levels of government have on that as well because it seems like no matter what type of great community recreation plans that may be in place, every now and then the province is going to dangle the carrot and say "okay, we have this new infrastructure funding that's available for arenas of this type of recreational facility," and they'll dangle the carrot and the next thing you know, cash strapped municipalities are going to say, "well, maybe we wanted this type of recreational funding but however, the money is there for this, we have a little bit of money in the pot, well, let's do it. And then it's the tail wagging the dog."

Youth Engagement

During the API conference workshop discussion, asking youth about what they needed in the built environment became an important discussion focus for planners. Many of the participants felt that they had little idea regarding what youth would need to improve the built environment. One participant commented about a youth oriented project that occurred in his region, which failed to attract youth, "the politician or the council decided that this was where the park is going to go and this is what we are going to put there. It didn't work and the kids are not involved so you talk about tools and resources and all…I'm thinking that if we want those plans to work the youth have to participate."

Another commented on ways to involve youth, "I think it would be interesting to take a plan out to a school and give kids a plan and say, "hey guys, what would you like to see in this community? Where would you like it? What is it you are after? Go for it. I don't care. Rip it. Scribble it. Do whatever. Let them run for it and whatever ideas they have let them throw it out there and find out how we would go about implementing this. We would help ourselves by creating a process."

Another practitioner suggested that youth participation needs to be examined more closely as a solution to youth obesity, "I think what's been pushed in the presentation today but also around the table too is that if we're trying to make change for youth then we really need to figure out a way to consult better with youth and I think if you went to a number of communities I'm sure that you would find a whole range of success stories or lack of success stories of trying to consult with that sort of group. If you're trying to plan for organized kinds of spaces or unorganized kinds of spaces or activities we really need to start at square one and find out a way to understand what their needs are and I'm not so sure that we do that in such a great way. But as planners we should know how to do it."

Another focus group participant stressed the same, "I would say data collection and doing your homework, consultation with users groups, and giving youth a voice are really important in this exercise."

Interdisciplinary Partnerships

Many of the planners identified in the focus groups that they felt working with other decision makers is essential to solving the problems associated with youth obesity. Exchanging ideas and resources with other practitioners and groups would help them to better understand and solve the issue at hand. One focus group participant commented on the problem, "There's such a disconnect between one agency and another agency and that is still happening in 2008. It's really quite stunning to me."

One practitioner suggested multi-disciplinary work as a real solution to the problem of youth obesity, "I think one of the big things is that we definitely have to work together with some of the various organizations. As I was saying there's a new public transportation system so I think that is something that could be implemented- to work with the recreation department and the YMCA programs that they have."

Another stressed that including various stakeholders in consultation processes could yield real results including information and knowledge exchange, "You talk about six questions here. What kind of policy and regulatory changes in your jurisdiction would make it easier? I wrote: improving inter-agency communication and collaboration because I find some of the people in positions don't necessarily have a sensitivity or awareness of some of these issues and perhaps if we could integrate community groups or other stakeholders in the community into some of these processes- where as now we just tend to be focused on the governmental agencies- and get some of these other people

to the table on a regular basis because we do have people who are cycling promoters or running groups or walkers or cross-country skiers and they've got all kinds of ideas as to how we could be working on the community to improve access to these things but they're not necessarily in the room when there's an opportunity to create some infrastructure or create policy or make some decisions."

Non-Traditional Opportunities

The API workshop focus groups examined the idea that youth should have a range of non-organized opportunities to integrate physical activity into their daily lives. One participant mentioned the lack of unorganized activity spaces for youth, "I think if there's spontaneous places to play as opposed to a regulation sized soccer field that the city has scheduled all day everyday of the week. But just to have a pick up game or whatever or kick around the ball or baseball or fly a kite or whatever the case may be, the spontaneous play areas seem to be lacking."

Another mentioned the lack of these spaces, "As I said we have excellent sports fields. Soccer, baseball, football, and also with the university they're supplying sports fields as well so we're solid in sports fields. Now that's all very organized kinds of space. How much space is there for doing unorganized stuff? I don't think there's quite so much."

Another mentioned the importance of unorganized passive recreation, "I think there's a large segment of youth that doesn't want to belong- or can't belong- to a sporting activity. So, I think it's important to create a built environment where they're going to be getting exercise without necessarily knowing they're going to be getting exercise." The same participant commented that non-traditional sporting opportunities would create more passive recreational opportunities for youth, "I think they're missing sometimes that things don't necessarily have to be over structured. Especially, going back to a small town environment. I think that they have to realize that in terms of promoting healthy living, the more you make things available at a passive level, the more success they are going to have at encouraging youth and other segments of society to get out there and to get active without necessarily having to go through the big facilities."

Transportation and Safety Issues

API workshop discussion groups all felt strongly that transportation issues were a main reason why youths do not have access to healthy lifestyles. One planner called attention to this idea by explaining, "If we want to tackle this aspect of obesity and lack of exercise we really have to look at biking. It's not always walking. Our own ability to get from A to B. And I think there's a lot of ways in which we can do that. It's just we haven't been doing it." Some of the planners mentioned the importance of walkability and creating communities which were geared towards passive recreation. "We know there's more interest in looking at active transportation. All of these things are coming together."

Though many of the planners felt changes to transportation infrastructure would be needed in order to help solve the problems associated with youth obesity, they also felt strongly about making changes to ensure transportation safety. Because biking on roads can quite dangerous for youth, safety measures are needed for youth to use active transportation infrastructure.

Table 5.

Best Practice Suggestions Gained from API Conference Workshop
1.)   Consider healthy eating choices in planning decisions.
2.)   Develop policy to support active transportation.
3.)   Locate schools and facilities in accessible, central community locations.
4.)   Engage and involve youth in the planning process.
5.)   Create and implement planning policy which represents a range of opportunities for youth physical activity.
6.)   Take a leadership role in collaborating with other disciplines to address the issue of youth obesity.
7.)   Create and implement policy to increase safety for youth.

4.0 Study Findings

This study was undertaken in order to learn more about how policy makers view this issues and what they feel would help to facilitate built environments that are conducive to youth healthy lifestyle.

4.1 Is the Issue of Youth Obesity on the Agenda?

The data collected during this study illustrates that the issue of youth obesity is not on the agenda for many practitioners. Those directly involved in health and those who interact with youth on a daily basis were more likely to understand the issue. For example, the school board officials, health practitioners, and recreation coordinators were most knowledgeable about youth issues. The focus group data communicated that those who worked specifically with the built environment such as planners and parks and trails coordinators were less likely to understand the importance of studying youth and were less likely to understand their role in facilitating healthy lifestyle choices for youth. API group participants mentioned many of the themes presented to them at the beginning of the workshop. These themes may have dominated the group discussion because of the presentations given. For example, we presented data from the initial focus groups that said that active transportation modes are important to consider when designing for youth. Participants mentioned trails a lot during the focus groups and many also mentioned that trails have become a funding priority. This discussion may have been in response to the presentation subject matter.

4.2 Who makes decisions influencing youth obesity?

As mentioned, many of the decision-makers interviewed, did not feel as if they were making decisions regarding youth obesity. Many of the focus group participants felt that councillors were the most influential decision-makers, as they were allocating where funding was directed within the built environment. Many of the planners specifically felt that they could only have minimal influence without the support of their municipal council. Many focus group participants also felt as they were competing with other departments for funding it was hard to make decisions as they were not in charge of how much funding they would receive for various projects. More research will need to be done to analyze how councillors see their role in this issue, whether this issue is on the municipal agenda, and how they can make decisions which help to alleviate youth obesity by facilitating a built environment conducive to healthy eating and physical activity.

4.3 Best Practice Solutions suggested by Decision-makers

The data collected from practitioners during the focus group sessions and the API Conference Workshop established that the decision-makers who participated generally interpreted three main themes which must be addressed

in order to combat the problem of youth obesity. All of the themes represented in the data could be grouped under three categories; knowledge; learning more about youth obesity and its causes and learning from youth, variety; taking a holistic approach to this problem and providing a range of solutions, and location and access; making sure that youth can safely access facilities and healthy lifestyle choice within their communities. Within these themes there were eight sub themes suggest how decision-makers can make changes to the built environment so that youth healthy lifestyles are considered.

Table 6.

Main sub-themes present in both Focus Group and API Workshop Discussion Data
•   Healthy eating •   Active transportation •   Location and siting of schools •   Youth engagement •   Non-traditional opportuntities •   Taking an interdisciplinary approach to this issue. •   Safety •   Interdepartmental Silos

Location and accessibility of healthy lifestyle options for Youth

Practitioners feel that location and accessibility of healthy lifestyle options for youth are critical to providing healthy lifestyle choice for this age group. Listed below are a series of recommendations that decision makers voiced during data collection that would help to improve the built environment to enhance youth physical activity and healthy eating choices:

1. Locate schools, facilities and healthy eating choices in accessible community locations.
Practitioner felt that school locations were particularly important. If schools are located on the periphery of a community, then youth must be bussed or driven there and they have little opportunity to walk. The same problem occurs when healthy facilities and physical activity opportunities, such as community centres or trail networks, are located where youth cannot easily access them. Healthy eating choices should also be located close to schools or other places frequented by youth so they have the opportunity to access healthy food instead of fast food choices. Practitioners acknowledged that traditional zoning often conflicts with locating these opportunities in ideal locations for youth. Youth needs should be taken into consideration when the location of these facilities are decided.

2. Develop policy to support active transportation.
Youth are unable to drive and therefore must either access physical activity and healthy eating choices using active transportation modes such as walking or cycling or must be driven there by adults. Many of the practitioners felt that enhancing active transportation would allow youth to more easily access healthy lifestyle opportunities. Developing trail systems, safe bike lanes, policy which accepts skateboarding, and access to bus routes are all ways, suggested by focus group participants, that active transportation can be enhanced to promote access to healthy eating choices and physical activity.

3. Create and implement policy to enhance safety for youth.
Practitioners felt that enhancing safety within the built environment would allow for youth to access healthy lifestyle choices more easily. Most of the focus group data on the subject of safety related to transportation infrastructure.

Many of the practitioners felt that travel within their community was unsafe for youth. For example, trails were not places that youth could access at night and roads were considered unsafe due to high traffic volumes. Though practitioners did not mention many specifics when it came to enhancing safety within the built environment, there are many ways that planners can take safety into consideration when addressing sites within the built environment. Lighting can be enhanced in areas where youth gather and along travel routes. Bike lanes can be provided in order to provide safe cycling routes. In many rural communities, sidewalks are not available. These can be provided to help to facilitate safe active transportation corridors for youth.

The Importance of Knowledge Exchange

The importance of knowledge exchange was discussed extensively during the focus groups. Practitioners wanted to work with other disciplines and learn from what information they had to share. They also felt very strongly about learning from the youth themselves. Decision-makers unanimously agreed that one of the best ways to solve this problem was to directly ask the youth themselves what kinds of environments would be helpful for them so that they could improve their lifestyle. Lastly, practitioners felt that they would like to dissolve inter-departmental silos that exist within the municipal, provincial, and federal government departments. Though they had no prescribed solution in mind to fix this problem some did explain that greater communication between the federal, provincial, and municipal government would help to alleviate some of the miscommunications that occur.

1. Engage and involve youth in the planning process

As discovered through the focus group and API workshop data analysis, in order to make changes to the built environment which will help to facilitate youth healthy lifestyles, planners must gain opinions from youth. Planners are often excellent in encouraging public participation and although youth may be difficult to engage at times, more efforts must be made in order to help the youth voice be heard. For example, youth design charettes are an excellent way to gain opinion on various projects. Not only would youth design charettes allow for youth to share opinions, it also teaches them about the importance of the planning process and allows them to spend time thinking creatively about their environment. Planners can form partnerships with local schools and advertise for public meetings and other types of public participation processes. Many cities, including HRM have developed youth advisory committees. These committees are one useful way to ensure that youth are involved in the planning process.

Another important aspect of engaging youth in the planning process comes through encouraging ownership of planning projects. Facilitating youth involvement in various projects, allows youth to take ownership of planning projects in the years to follow. For example, HRM Community Development engages youth by having them paint murals throughout the municipality. Not only does this help youth to be physically active, but it allows them to make an important contribution to their community and feel a sense of ownership over a space within the built environment. One focus group participant asked youth what they wanted in their community and this ended up contributing to the creation of a BMX bike park that is now popular for youth. If these youth had not been asked to contribute to the design then this park might not be as important to them.

2. Collaborate with other disciplines to solve the problem of youth obesity.

Practitioners felt that they would like to collaborate with other disciplines to find solutions to the problem of youth obesity. They acknowledged that they would like to know how others view the issue of youth obesity and include other disciplines when creating decisions of this nature. When creating built environments that cater to youth, planners can consult with other practitioners in different fields to gain knowledge on the issue of youth obesity and the built environment.

3. Work to decrease inter-departmental silos.

Focus groups participants felt that they would like to decrease inter-departmental silos within municipal, government, and federal departments. Many of those who worked for municipal offices felt that the province was shifting much responsibility to them and some of the provincial planners felt that certain issues were best dealt with at a local or municipal level. Focus group participants felt that in order to solve the problem of youth obesity, there would have to be more communication between departments. In particular, the Department of Transportation was mentioned during the focus groups. Participants felt that they would like to have greater communication with this department in order to improve active transportation. Though this issue came up, there were no solutions prescribed for this problem besides that idea that there needed to be more communication and collaboration among departments.

Providing a Variety of Options for Youth Healthy Lifestyles

Decision-makers felt strongly that providing a variety of options for youth was an important part of solving the problem of youth obesity. Providing various healthy eating choices and ways to be physically active was considered crucial. Some youths are not going to want to participate in organized sporting events so options should be available for them to include activity in their day-to-day life, by walking, cycling, or using the trail systems. During the data collection, healthy eating was not discussed as much as physical activity. Decision-makers should take a holistic approach to this issue and understand that providing a variety of ways to increase healthy behaviours would be effective in promoting healthy lifestyles for youth. Healthy eating must be considered in conjunction with physical activity in order to give youth the most variety in their everyday lives and a considerable number of options when it comes to how they make choices to be healthier.

1. Create and implement policy which represents a range of opportunities for youth physical activity.

The data collected during this Project suggests that youth may need more non-traditional forms of physical activity. They need a built environment that is conducive to their day-to-day travel patterns and needs. Currently, money is being invested in sports facilities which are somewhat interest-specific and not inclusive to all youth in general. Planning policies should be created which take into account youth needs and provides more general opportunities for walking, cycling and active modes of transportation. Priority should be directed towards activities that both genders will actively participate in. Practitioners felt strongly that opportunities should be made available for youth who do not want or have the financial capability to participate in programmed opportunities such as those that take place in an arena or a community centre. They emphasized that not enough opportunities are available for unstructured opportunities or for activities which are not generally associated with a high level of physical activity. As previously indicated, HRM has a program where youth paint murals within their community. Though this would not be traditionally considered as a physical activity, the level of effort and commitment involved is certainly not passive and requires a significant physical activity component. Encouraging policies which support such activities is one way that planners can help to manage the issue of youth obesity.

2. Consider healthy eating in planning decisions.

The data collected during the Focus Groups illustrates that healthy eating was not a planning consideration for the built environment and youth health. In order to help mitigate the problem of youth obesity, a holistic approach must be taken and healthy eating opportunities must be considered in conjunction with and in addition to physical activity. Planners can examine and influence traditional zoning mechanisms to define and limit accessibility to 'fast food' outlets in areas close to schools and places where youth engage in communal activities. For example, planners could adjust commercial zoning to take this issue into consideration. Practitioners, in consul-

tation with health agencies, should examine and define criteria for provision of healthy food options for youth.

4.4 Best Practice Ideas for Planners

Though many planners felt that youth obesity was not a priority for them due to the lack of funding and general nature of planning in Atlantic Canada, some strategic planning tools can be used to change the built form to encourage healthy lifestyles. Three main tools or strategies can be considered by planners to mitigate youth obesity through their influence on the built form:
- Public Participation Processes
- Develop Standards and Youth Obesity
- Land Use Policy and Youth Obesity.

Public Participation Processes

Public participation processes have become an important part of consultative process for planning projects. Public consultation is legally mandated for many planning decisions. It is therefore an excellent opportunity for planners to engage youth. It is a very effective way to get input and find out more about the kinds of environments that youth would like to participate in physical activities and choosing healthy options for diet. Asking youth questions regarding their environments is crucial and public participation processes provide an ideal forum for such interaction. As planners are already required to run public participation processes, this would be one way that planners could work to manage the problem of youth obesity.

Table 7.

Use Public Participation processes to engage youth.
Youth Engagement • Youth advisory committees • Youth design charettes
Youth Leadership • Allow youth to organize planning efforts • Encourage them to become involved within their community through planning participation
Youth Ownership • Look for ways to include youth in public participation processes. • Look for ways to include youth in community projects (e.g. Mural Painting in HRM).

Development Standards and Youth Obesity

Planners are generally engaged to look at how to create efficient, sustainable and reasonable development standards for the community in which they live. Research shows that neighbourhoods which encourage high density and are oriented towards pedestrians and transit include higher levels of everyday physical activity. If planners were to create development standards which encouraged walkability, efficient access to public transit, and safe opportunities for active modes of transportation, they would promote safe youth healthy lifestyles. Developing standards which apply to youth would also enable planners to incorporate a group with a rather diverse set of needs into their planning objectives.

Table 8.

Create development standards which encourage density and pedestrian and transit oriented development.
Safety • Adequate lighting in areas where youth congregate, participate, and travel. • Create standards which encourage safe active transportation routes for youth such as bike paths and side walk infrastructure.
Infrastructure • Development standards should encourage sidewalks, pathways and walkable connections. • New development should intersect existing bus routes.
Active Modes of Transportation Use development standards to encourage bike lanes. Ensure that cycling and walking opportunities intersect bus routes and other transit opportunities.

Land-Use Policy and Youth Obesity

Planners create land-use policy which influence where schools and other facilities are located. These locations are central points of youth activity and are therefore especially crucial in defining access to healthy eating choices. Young people walk everywhere or need to be driven to activities by their parents as they are still too young to drive. Planners can help to create land-use policy which presents accessible options for youth physical activity. The following table represents a list of land use policy options that have been suggested in the literature and discussed during the focus groups.

Table 9.

Create land-use policy which encourages healthy lifestyles for youth.
Safety • Create policy and investments which promote safe travel for youth. • Ensure that youth have safe options within their neighbourhoods for physical activity
Active Modes of Transportation • Invest in active modes of transportation for youth to access schools, facilities, and other physical activities and healthy eating opportunities. • Create policy which allows youth to access public transit options at a reduced price.
Locations • Create zoning which is conducive to the promotion of healthy eating (examine ways to legally zone out traditional fast food outlets, or require them to offer healthy choices) • Place schools in central location so students can walk to them and use them after hours and on weekends
Healthy Eating Choices • Work to zone out fast food in higher traffic areas. • Invest in and implement policies which encourage healthy eating options to be considered in planning decisions.

5.0 Final Conclusions

Though this study provides valuable insight on the context of how decision-makers view this issue, there is still much work to be completed on this topic. Almost 50 decision-makers participated in this study, but more discussions are required. Although design engineers were invited to participate in the study, none did so It would be helpful to interview them to more fully determine the context of their engagement and their potential to influence issues of youth obesity during the design process. Political decision-makers were often discussed during the focus groups as being a key group whose role has a significant effect on the built environment and health. Many planners felt that solving the issue of youth obesity would happen more quickly if political decision-makers were aware of the urgent nature of the issue. In conclusion, interviews and knowledge exchange with political decision-makers, such as those completed during the API workshop with planners, might provide valuable insight for this aspect of the study on decision-makers.

The research confirms that the issue of youth obesity is not on the agenda for most practitioners. Further research is needed to more fully inform practitioners to understand the importance of prioritizing youth healthy lifestyles and implement policies affecting change.

Although my study provides insight specifically within the context of decision-makers, it is only a small component of the research needed to further this study and achieve the end goal of proposing specific policy and investment recommendations. Research needs to investigate the social dynamics of youth obesity. Work with youth can identify the context of their values in relation to healthy lifestyles. This research is in motion and currently being conducted by others working on this Project.

Much research needs to be completed to make specific recommendations on how to reduce youth obesity. This study has focused on the roles of decision-makers and their potential contribution to resolving the issue. In many cases, youth health is not on the agenda when policy makers consider built environment decisions. While decision-makers espouse the need for healthy communities, they may not have an adequate knowledge base to facilitate and promote healthy lifestyles for youth. Many planners who participated felt that they had a limited role because of the political nature of decision-making about the built environment. While this study has attempted to explore how decision-makers perceive the issue of youth obesity and the role they can play in solving this problem, many questions remain. How can the issue of youth obesity be added to the agenda of local governments and decision-makers throughout Atlantic Canada? How can knowledge exchange with these practitioners be implemented? What specific investment and policy recommendations need to be put in place to encourage change?

My study suggests some best practices that decision-makers can conduct to help to improve the built environment to facilitate youth healthy lifestyles for future generations of youth in Atlantic Canada. Information provided by the "Optimizing Investments in the Built Environment to Reduce Youth Obesity" Study will eventually produce a specific framework for this purpose. As youth obesity rises in Atlantic Canada it becomes increasingly important to create built environments that support healthy lifestyles. Decision-makers, such as planners, will be at the forefront of building, approving, and promoting these environments. With more knowledge exchange on this topic in the future, the built environment will inevitably improve and promote healthy youth.

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