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measuring what matters

From Connections to Engagement:

Pathways to a More Caring and Involved Citizenry

Prepared for:

vancoouver foundation

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EXECUTIVE SUMMARY

This report presents a model of several causal pathways that lead citizens to become more committed to their neighbourhoods and community, and more willing to take actions to solve problems or participate in activities that make neighbourhood and community better.

The model is based on the data collected from Vancouver Foundation's *Connections and Engagement Survey* conducted in the spring of 2012. The survey found that most neighbourhood connections are weak, most residents do not participate in any form of community activity, and forging meaningful relationships is a challenge for many, particularly across barriers of difference such as ethnicity.

The survey quantified the issues and challenges that exist. The model points to opportunities to address these issues and challenges effectively. It can be used as a tool by Vancouver Foundation and others, to identify how to direct investments and resources aimed at strengthening connections and fostering engagement.

In developing the causal pathways in the model, we were also guided by past research, particularly in the area of social capital, which identifies the importance of strengthening both bonds within groups and bridges between groups.

Therefore, our model includes two pathways—one to strengthen bonds and one to strengthen bridges. However, there is overlap between the two pathways. For example, strengthening bonds within neighbourhoods that are diverse would also strengthen bridges between groups of people with different backgrounds.

At the base of the bridging pathway is Freedom from Discrimination, whether that is based on ethnicity, age, one's economic situation, one's appearance or disability status. This emerged as a powerful driver at the base of our model. Only when we feel that we are treated equally by others can we begin to develop a sense of being part of the community.

At the base of the bonding pathway is Conversations with Neighbours. The survey results showed consistently that very simple acts of neighbourliness such as having conversations with neighbours have a powerful impact on how we feel about our neighbourhoods and our neighbours.

Our model shows what we call 'the drivers of change' along each of these two pathways. It also shows the two areas where Vancouver Foundation can make a significant difference: Conversations with Neighbours and Connecting across Boundaries.

BACKGROUND

Vancouver Foundation's vision and long-term objective is healthy, vibrant, livable communities.

In the summer of 2011, the Foundation conducted a public consultation to determine what community issue in metro Vancouver it should focus additional energy and resources on to have a greater impact in the community.

The Foundation surveyed 275 charitable organizations and interviewed over 100 community leaders across metro Vancouver. The Foundation learned that what concerned people the most was a growing sense of isolation and disconnection. People said that they live increasingly in silos, separated by ethnicity, culture, language, income and even geography. They lamented what they saw as a deepening civic malaise, a retreat from neighbourhood and community life, and a corrosion of caring that they said hurts them personally and hurts their community.

The Foundation learned that in order to have a meaningful and sustained impact, and in order to be able to tackle complex issues like homelessness and poverty, they must first work to help connect and engage residents in the community.

The 2012 Vancouver Foundation Connections and Engagement Survey was designed to measure connections and engagement among residents across metro Vancouver. We measured connections by measuring the scope and strength of relationships with friends, neighbours and people in the broader community. We measured engagement by measuring participation in activities that make neighbourhoods and communities better places to live. And we explored the barriers that prevent people from connecting and engaging.

From the beginning, the assumption was that connections and engagement are really two sides of the same coin. Only through forging strong relationships will we care enough to work together to make our community a better place.

WHAT THE SURVEY FOUND

The survey results released in June 2012 validated much of what the original community consultations indicated were growing challenges. The survey found that most neighbourhood connections are weak, most residents do not participate in any form of community activity, and forging meaningful relationships is a challenge for many, particularly across barriers of difference such as ethnicity.

These are the key findings:

• Our neighbourhood connections are cordial, but weak.
    While most of us know the names of at least two of our neighbours, the connections typically stop there. Most of us do not do simple favours for our neighbours (like taking care of their mail when they are away) and fewer have visited a neighbour's home or invited a neighbour over.

    The most often-cited reason for not knowing neighbours is that people seldom see each other. However, another significant reason seems to be indifference: people

prefer to keep to themselves, or have little interest in getting to know their neighbours.

One-third of the people we surveyed do not know if their neighbours trust each other. And barely a majority thinks that the ties in their neighbourhood are growing stronger.

• Many people in metro Vancouver are retreating from community life.
In the past year, three-quarters have not participated in neighbourhood and community activities.

It isn't a lack of time that stops people from getting involved. The most often-cited reason for not participating in neighbourhood and community life is a feeling that people have little to offer.

• Metro Vancouver can be a hard place to make friends.
One-third of the people we surveyed say it is difficult to make new friends here. And one in four say they are alone more often than they would like to be. In both cases, people who experience this also report poorer health, lower trust and a hardening of attitudes toward other community members.

• There are limits to how people see diversity as an opportunity to forge meaningful connections.
Over one-third have no close friends outside their own ethnic group. Respondents generally believe that people prefer to be with others of the same ethnicity.

The sense of neighbourhood trust decreases in neighbourhoods with a greater diversity of languages spoken.

Many people believe all new immigrants and refugees, regardless of where they come from, would be welcome in their neighbourhood. However, some residents rank which groups they believe would be the most and the least welcome.

• The affordability issue in metro Vancouver is affecting people's attitudes and beliefs.
Most people believe Vancouver is becoming a resort town for the wealthy. These same people also tend to think that there is too much foreign ownership of real estate.

The survey also identified certain groups of people who are struggling more than others to feel connected and engaged.

• People who live in certain types of dwellings, particularly in high-rises, are less likely to know their neighbours' names, to chat with them or do small favours for them. They also report lower levels of neighbourhood trust.

• People in the 25 to 34-year-old age group feel more isolated and alone than those in other age groups, and they report greater resentment about how metro Vancouver is changing.

• While neighbourhood connections are weak for the majority of people who took the survey, we found that Chinese respondents were somewhat less likely to interact with neighbours.

The full report on the Connections and Engagement Survey, and a series of mini reports on particular findings, are on the Foundation's website at vancouverfoundation.ca/connect-engage

The benefits of a connected and engaged population are well understood.

• Epidemiological research shows that social connections decrease rates of suicide, colds, heart attacks, strokes and cancer, and improve people's ability to fight or recover from these illnesses.

• Psychology research shows that social connections make people less prone to depression and more inclined to help one another.

• Sociology studies suggest that social connections reduce crime: in neighbourhoods where people know each other's names, there is less crime no matter what the income level of the area. There are also fewer teenage pregnancies, less child abuse, welfare dependency and drug abuse, and increased graduation rates.

• Economic studies show that social connections make workers more productive, firms more competitive and nations more prosperous.

We are simply better off in many of the ways that matter.

The next big question for the Foundation is: "What can it do to help build a more connected and engaged community in metro Vancouver?" The purpose of this report is to help the Foundation and other relevant groups and organizations do just that.

STRUCTURE OF THIS REPORT

To help identify what can be done to build a more connected and engaged community we have taken several steps in this report.

1. We briefly outline the process that we went through to identify what will lead to greater connections and engagement.

2. We show further evidence validating the impact that our scale of engagement has on a range of measures of community participation, civic participation and community attitudes.

3. We present the elements of our statistical model illustrating how to create a more caring and involved citizenry.

4. We include technical aspects of our statistical procedures.

OUTLINE OF THE PROCESS

We began with what, ultimately, the Vancouver Foundation (and likely other groups) wants to influence: residents' commitment to their neighbourhoods and community and their willingness to take action to solve problems or participate in activities that make neighbourhood and community better.

We then identified other key constructs that, based on our analyses and past research, should play an important role in driving social connections and engagement.

We adopted a statistical procedure called Structural Equation Modelling (SEM) to test a series of models of the key drivers of change. SEM tests the validity of various 'causal pathways' to change. It illustrates how one set of variables, or a construct, influences another and, in turn, how that construct influences yet another. It provides a roadmap of how change occurs and can help organizations prioritize investments in the community.

In developing the causal pathways we were also guided by past research, particularly in the area of social capital. This research has identified the importance of strengthening both **bonds within groups** and **bridges between groups**. Therefore, our model includes two pathways—one to strengthen bonds, one to strengthen bridges. However, there is overlap between the two pathways. For example, strengthening bonds within neighbourhoods that are diverse would also strengthen bridges between groups of people with different backgrounds.

Note that in this process we also targeted constructs that could be influenced through community-based initiatives. This is why we did not include demographic variables like age, income, type of dwelling or family structure in our analysis. Some of these constructs are correlated with connections and engagement. For example, we found that those living in high-rise apartments were less connected and engaged with their neighbours. Moving forward, these types of findings should inform decision-making by groups. Builders and developers interested in creating more vibrant communities should learn from our results and design living spaces that encourage more interaction among neighbours.

Our goal with the SEM analysis is to identify those things that community residents and community groups themselves can do, with the help of Vancouver Foundation and others, to create a greater sense of purpose, empowerment and commitment.

MEASURING WHAT WE WANT TO INFLUENCE

We needed to a) identify a set of variables that captured residents' commitment to their neighbourhoods and community, and their willingness to take actions to solve problems or participate in activities that make neighbourhood and community better, and b) validate that this set of variables was in fact related to the other attributes characteristic of strong and vibrant neighbourhoods and communities.

We identified this set of variables through both conceptual and statistical analyses. We first identified those variables which we believed, based on their item content, best reflected residents' psychological connection and commitment to neighbourhood and community, as well as their willingness to act in the service of neighbourhood and community. We believed that any construct we formulated would be stronger if it included both measures of a psychological commitment to act as well as actual behaviour.[1]

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[1] Note that a construct based solely on behaviour runs the risk of under-valuing the contributions made by residents who may have conditions, such as physical disabilities, that make it difficult for them to participate in activities on a consistent basis.

We identified two survey questions that measured residents' psychological connection and commitment to neighbourhood. These included:

- The ties in my neighbourhood are growing stronger (rated on a 5-point scale anchored by 'strongly agree' and 'strongly disagree')

- If there were problems in my neighbourhood like cars driving too fast or people not taking care of their property, it would be hard to get people to work together to solve them (rated on a 5-point scale anchored by 'strongly agree' and 'strongly disagree')

We identified three survey questions that measured residents' willingness to act in the service of neighbourhood and community. These included:

- In the past 12 months have you participated in a neighbourhood or community project? (Yes or No)

- In the past 12 months have you attended a neighbourhood or community meeting? (Yes or No)

- In the past 12 months have you done any volunteer work for any organization or group? (Yes or No)

We combined the data from these five questions to form a new variable, which we labeled "Caring and Involved Residents".

Each survey participant received a score on this variable, which reflected the extent to which they are likely to care for and take action in their neighbourhoods and communities. Scores could range from 0 to 5 based on the responses to the survey questions. For example, if a participant agrees that neighbourhood ties are growing stronger, disagreed that it would be difficult to get their neighbours to solve problems, had participated a neighbourhood or community project in the past year, had attended a neighbourhood or community meeting in the past year and volunteered in the past year, they would receive the maximum score of 5. If their response pattern was the exact opposite they would receive a score of 0. Those who only answered one survey item in the positive direction received a score of 1, and so on.

The percentage of survey participants receiving each score is in the table below.

Percentage of Survey Participants Scores on Caring and Involved Residents Scale

0 Lowest level care and involvement	1	2	3	4	5 Highest level of care and involvement
23%	27%	22%	16%	9%	3%

Just under a quarter (23%) of survey participants received a score of 0—meaning that that they had not done any of the following in the past year—participated in a neighbourhood or community project, attended a neighbourhood or community meeting, or volunteered. Also, they did not agree that the ties in their neighbourhood are growing stronger and they agreed that it would be difficult to bring neighbours together to solve problems.

In contrast, 28% of survey participants received a score of 3 or higher, meaning that they answered in the positive direction on the majority of the survey items. A review of the results showed that, in most cases, a score of 3 tended to be a dividing point on a number of important measures. We therefore considered a score of 3 or higher a useful benchmark, differentiating the more caring and involved from the less caring and involved.
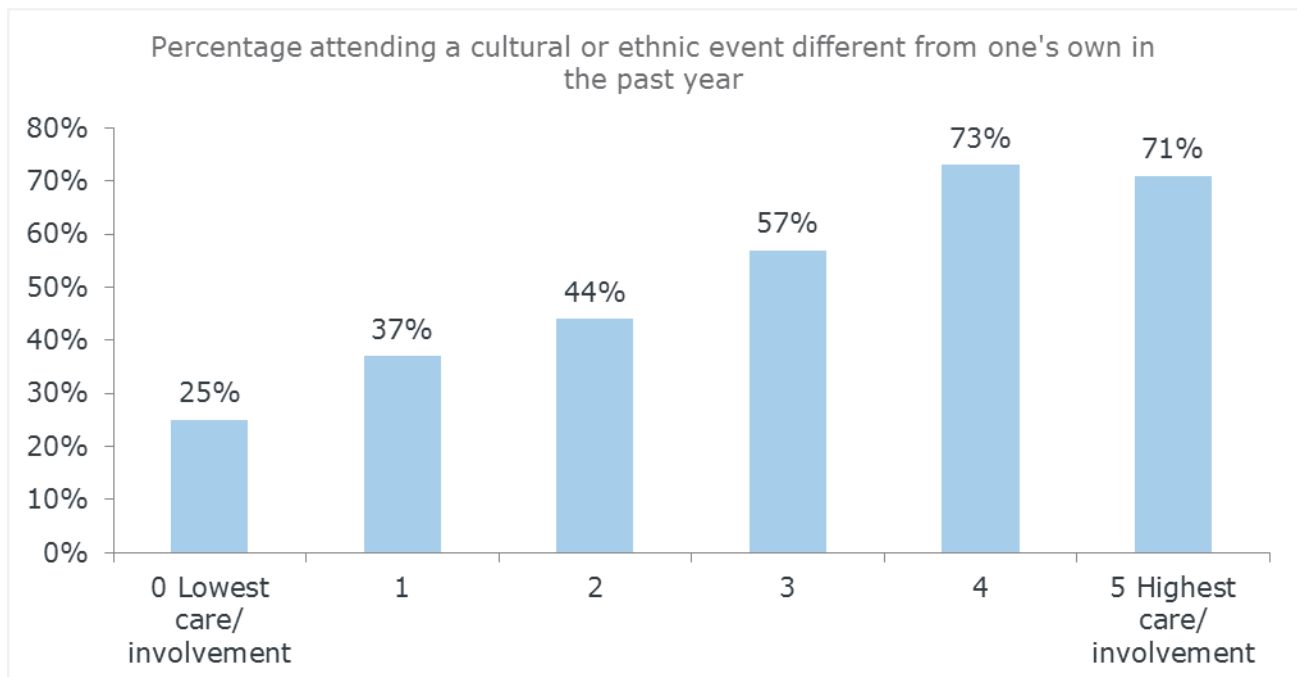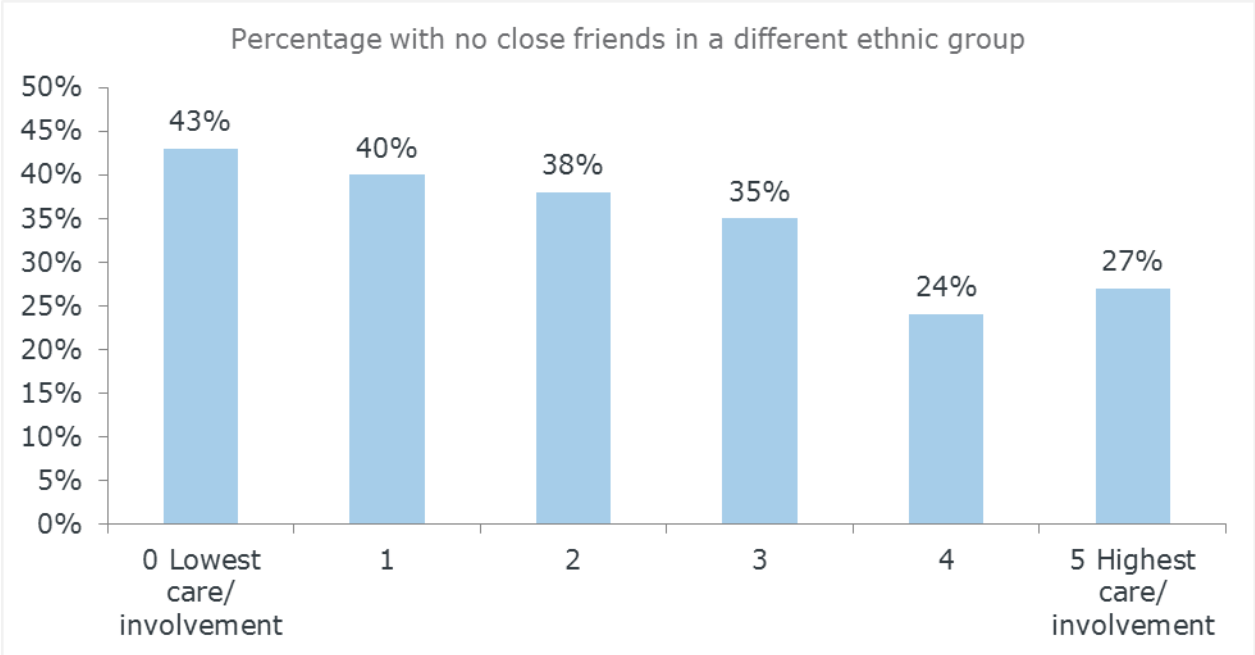
Validating the Impact of the Construct

Our next step was to validate that the 'Caring and Involved' construct we created was in fact strongly related to the attributes characteristic of strong and vibrant neighbourhoods and communities. These include: connecting across cultural and ethnic boundaries, forging meaningful personal relationships, developing strong neighbourhood relations, a sense of belonging, and participating in civic life.

The graphs that follow illustrate how our construct relates to these measures. Specifically they show the results of the relevant survey variables as a function of the score that survey participants received on our Caring and Involved scale.

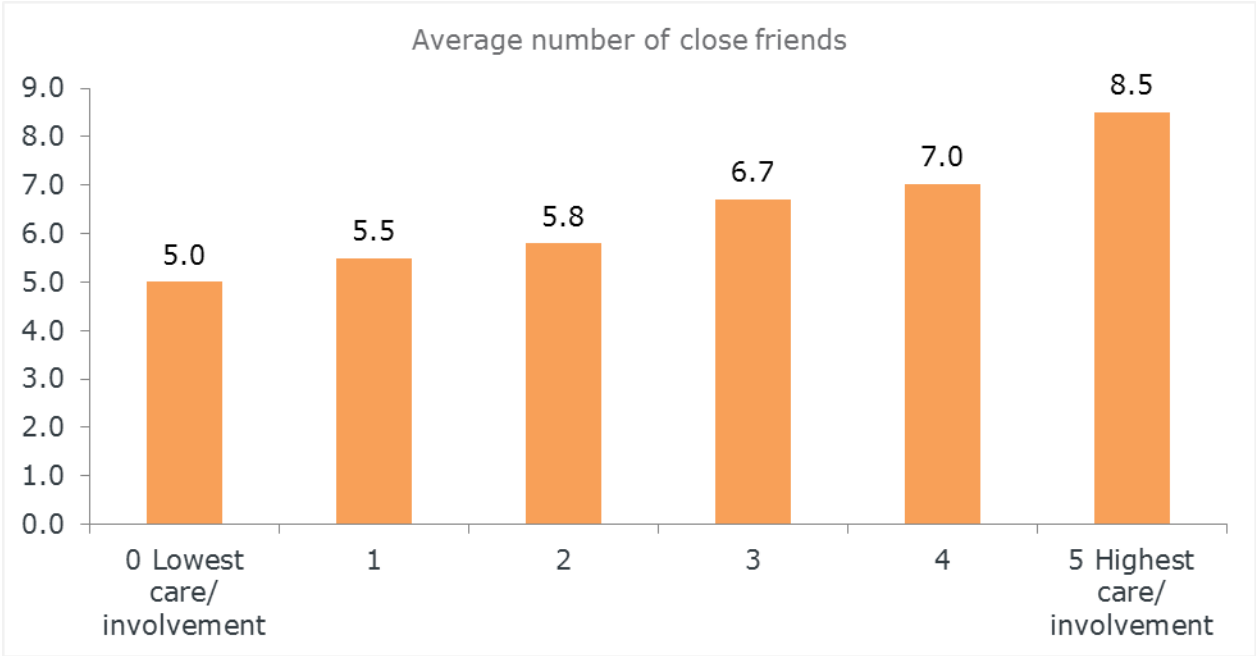### Connecting Across Cultural and Ethnic Boundaries

Our Caring and Involved scale does not include any variables that tap directly into residents' relationships or attitudes toward different cultural groups. However, as scores on our scale increase, so does the likelihood that residents will attend cultural and ethnic events different from their own culture, and the likelihood that they will have close friends in an ethnic group different than their own.

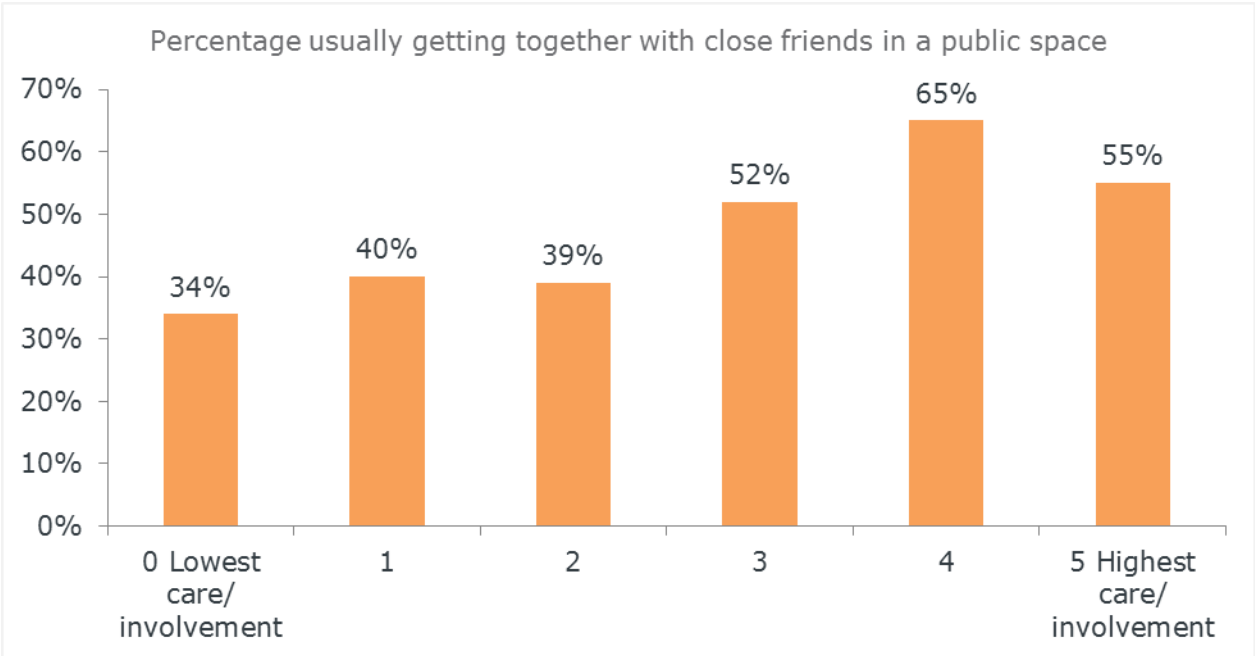Percentage attending a cultural or ethnic event different from one's own in the past year

Score	Percentage
0 Lowest care/involvement	25%
1	37%
2	44%
3	57%
4	73%
5 Highest care/involvement	71%

Percentage with no close friends in a different ethnic group

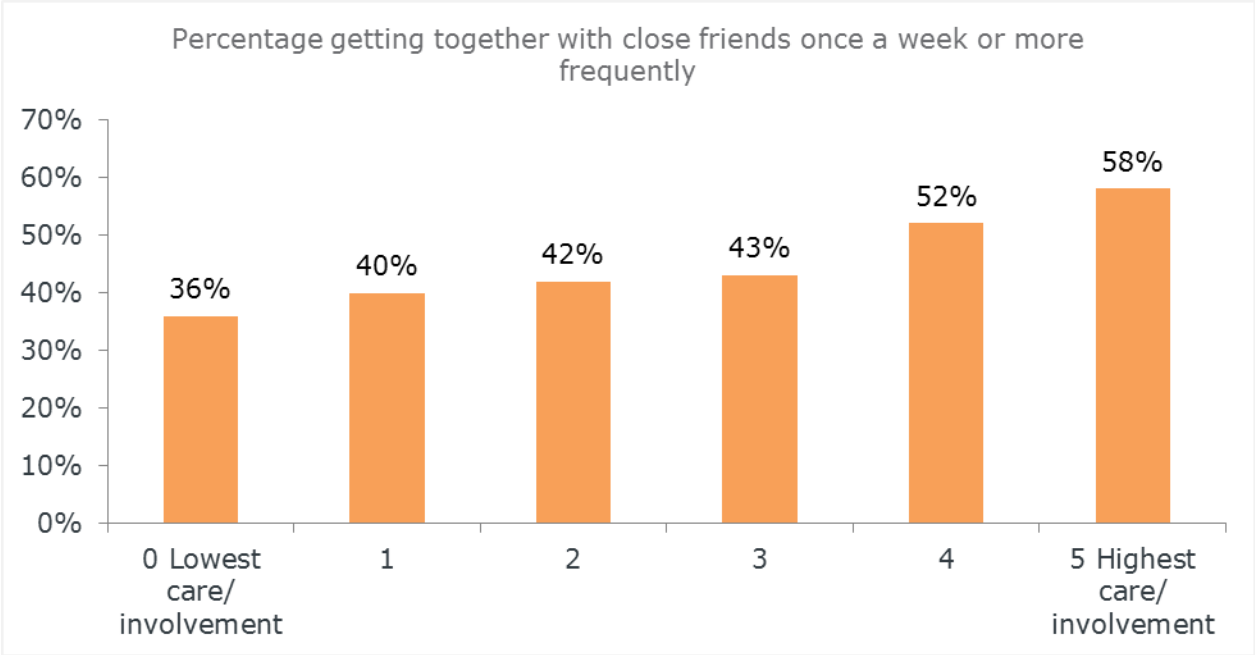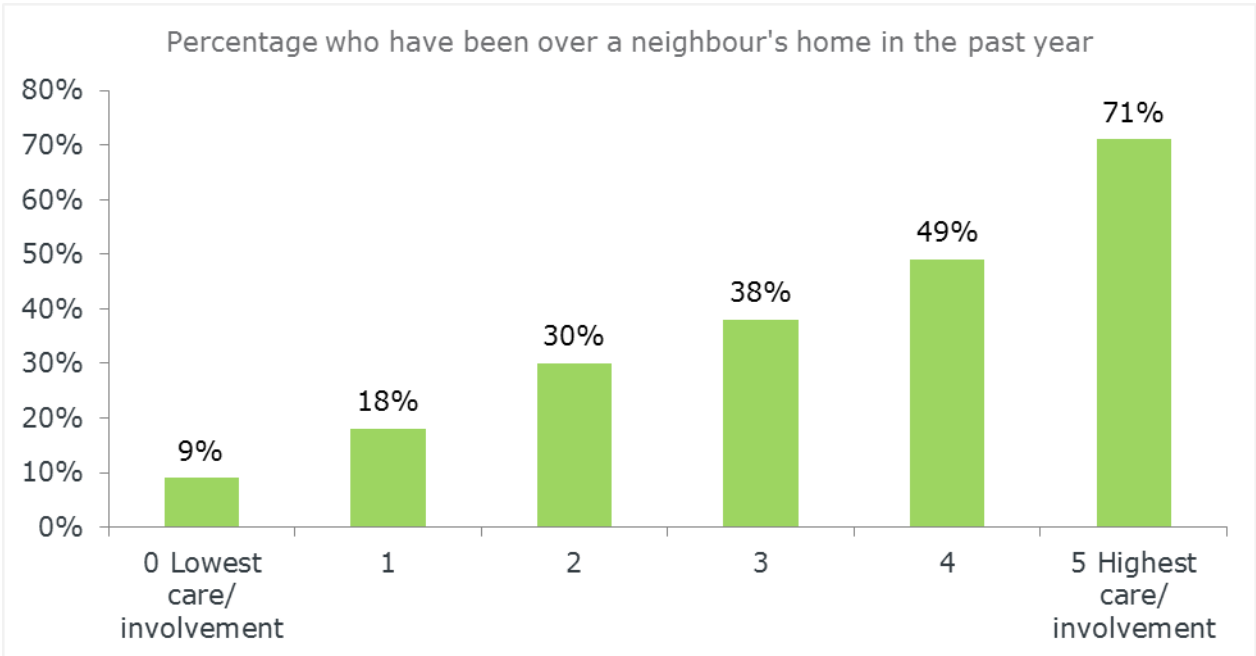| Category	Percentage
0 Lowest care/involvement	43%
1	40%
2	38%
3	35%
4	24%
5 Highest care/involvement	27%

Forging Meaningful Personal Relationships

The Connections and Engagement survey results showed that those residents who reported more close friendships also tended to report better levels of overall health, greater ease in forging social connections and higher levels of participation in neighbourhood and community activities. Those who score higher on our Caring and Involved scale have more close friends, get together with their close friends more frequently and are more likely to meet with close friends in public spaces, like parks and community centres.
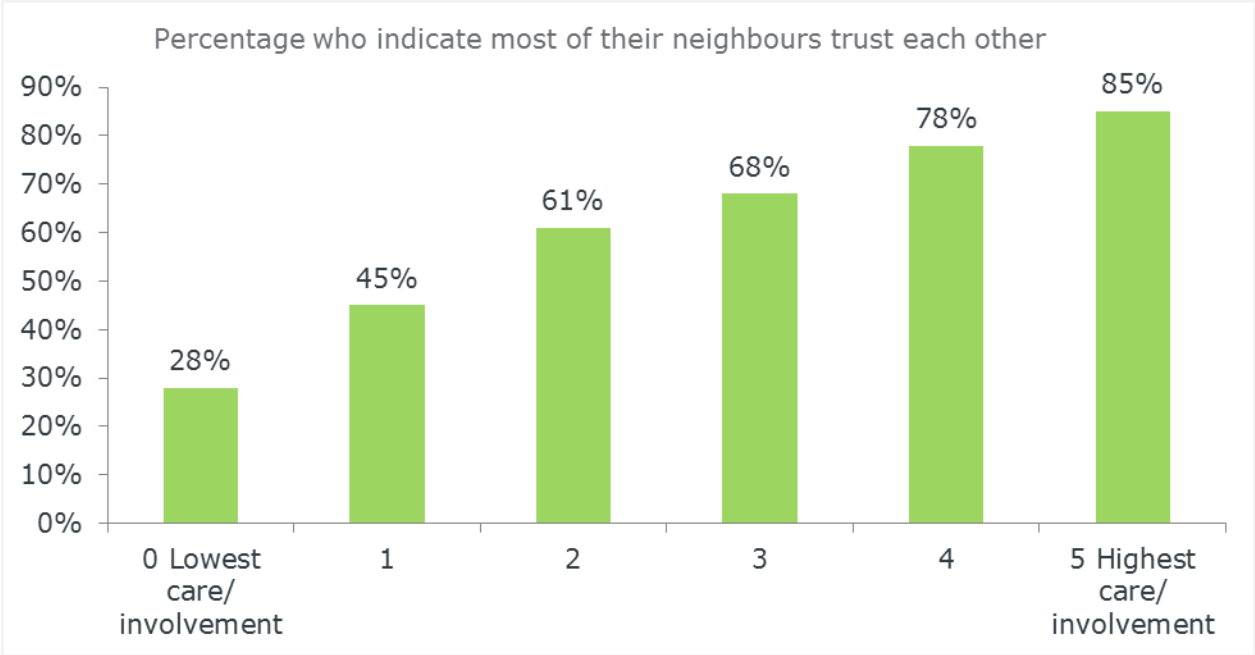
Average number of close friends

Caring/involvement level	Average
0 Lowest care/involvement	5.0
1	5.5
2	5.8
3	6.7
4	7.0
5 Highest care/involvement	8.5

Percentage getting together with close friends once a week or more frequently

Care/involvement	Percentage
0 Lowest care/involvement	36%
1	40%
2	42%
3	43%
4	52%
5 Highest care/involvement	58%

Percentage usually getting together with close friends in a public space

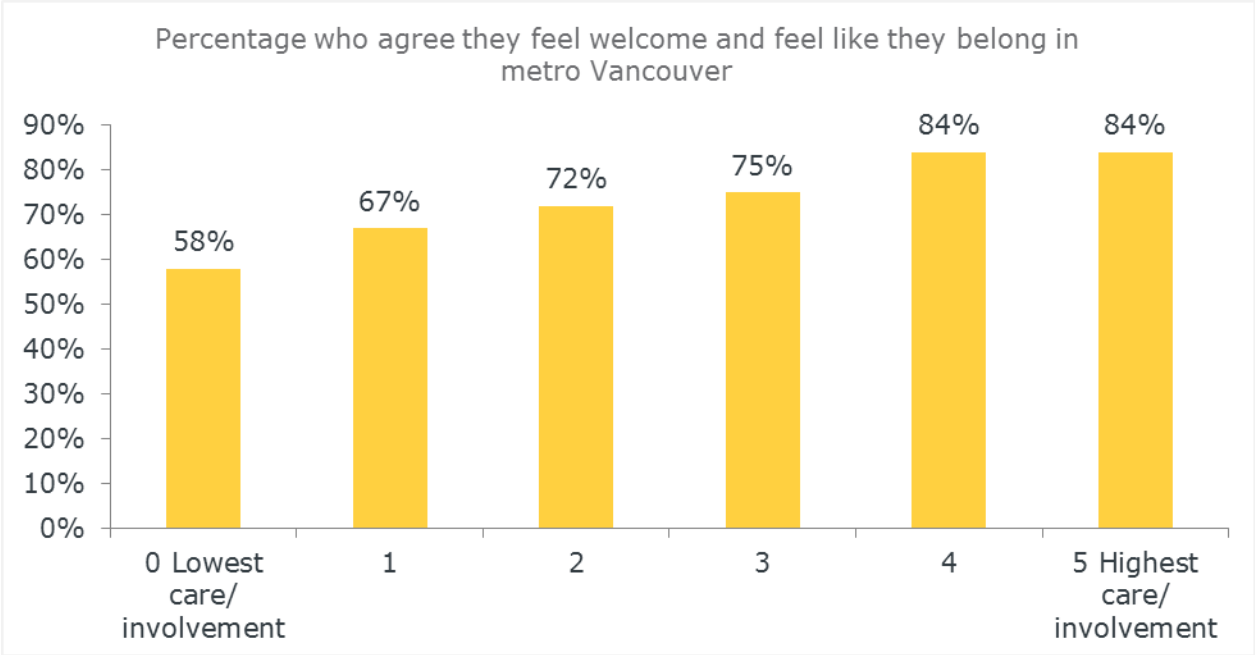| Care/involvement	Percentage
0 Lowest care/involvement	34%
1	40%
2	39%
3	52%
4	65%
5 Highest care/involvement	55%

Neighbourhood Relations

The survey found strong relationships between meaningful contact with neighbours and neighbourhood trust. Those who have regular conversations with their neighbours and who get together with their neighbours socially are more trusting, and are more likely to participate in neighbourhood and community activities. Those who do not feel a sense of trust among neighbours feel much less welcome in their neighbourhood. They also feel more alone and find it difficult to make friends. They are also more likely to hold negative attitudes about the future direction of metro Vancouver. For example, they are more likely to agree that Vancouver is becoming a resort town for the wealthy. It is not surprising, therefore, that low scores on our Caring and Involved scale are strongly associated with a lack of neighbourhood trust and a lack of meaningful contact with neighbours.

Percentage who have been over a neighbour's home in the past year

Percentage who indicate most of their neighbours trust each other

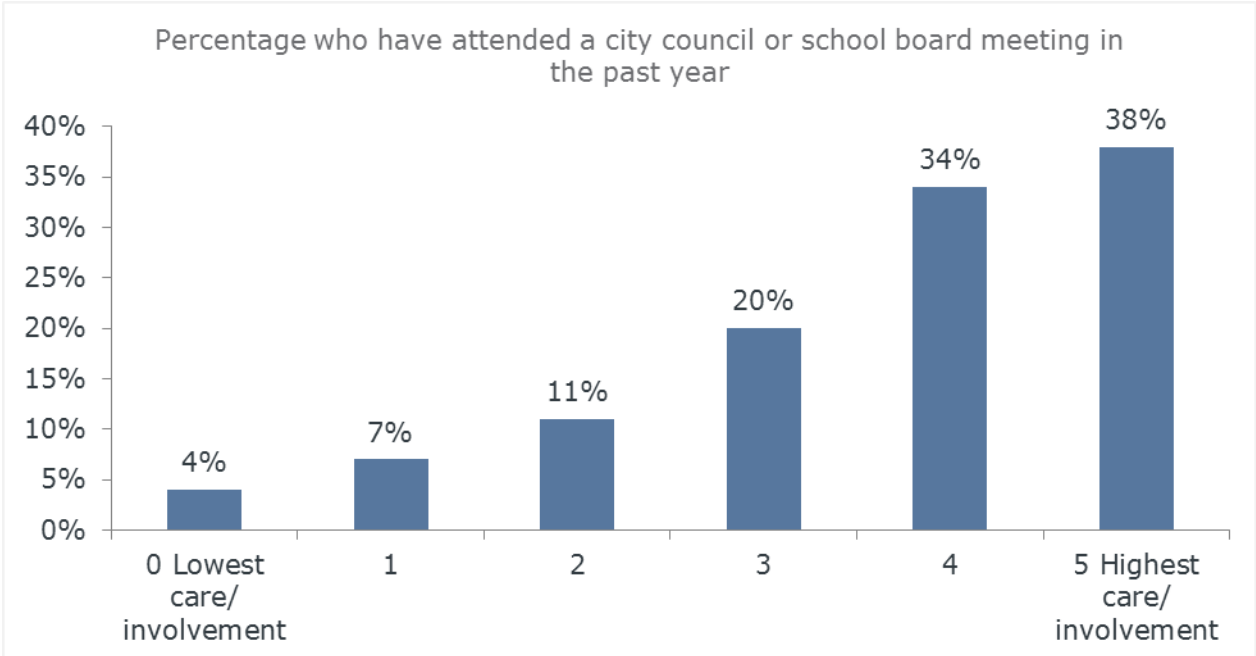|	
0 Lowest care/involvement	28%
1	45%
2	61%
3	68%
4	78%
5 Highest care/involvement	85%

Feeling Part of the Community

Those who score low on our scale are much less likely to feel they are a part of metro Vancouver and belong here. The survey results showed that when residents lack a sense of belonging, they feel little optimism about the intentions of others and are much less likely to make efforts to connect with others. For example, they are much more likely to report experiencing discrimination, much more likely to perceive low levels of trust in their neighbourhoods and much less likely to participate in neighbourhood and community activities.
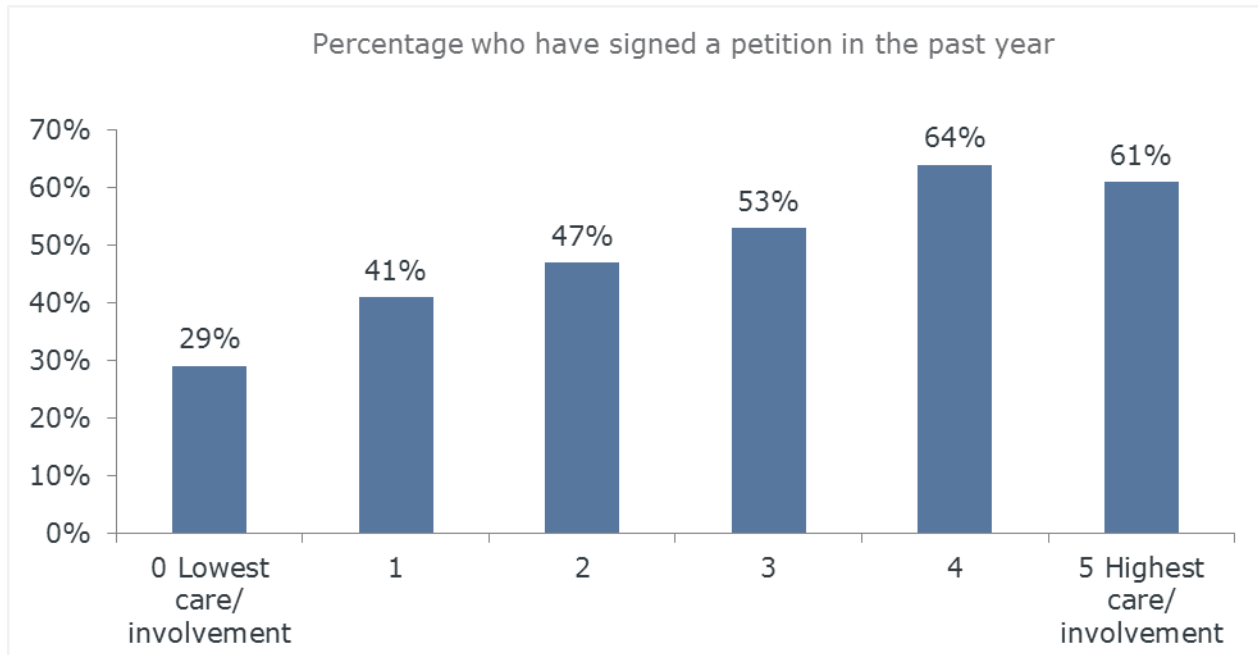
Percentage who agree they feel welcome and feel like they belong in metro Vancouver

Category	Percentage
0 Lowest care/involvement	58%
1	67%
2	72%
3	75%
4	84%
5 Highest care/involvement	84%

Civic Participation

Higher scores on our Caring and Involved scale are strongly associated with attendance at school board and city council meetings, and with the likelihood that residents will sign petitions. The survey results showed that these forms of participation were also associated with participation closer to home—for example, getting together with neighbours, participating in a neighbourhood or community event—as well as a greater sense of trust among neighbours and a willingness to help neighbours.

Percentage who have attended a city council or school board meeting in the past year

Score	Percentage
0 Lowest care/involvement	4%
1	7%
2	11%
3	20%
4	34%
5 Highest care/involvement	38%

Percentage who have signed a petition in the past year

0 Lowest care/involvement	29%
1	41%
2	47%
3	53%
4	64%
5 Highest care/involvement	61%

Implications of the Caring and Involved Findings

The implications of the results are very clear. The extent to which residents score higher on our Caring and Involved scale, the more they connect across cultures, develop stronger personal relationships, feel comfortable in community spaces, trust their neighbours, and participate in civic life.

In most cases, the differences between those who score 0 versus those who score 3 or higher are very dramatic, meaning that trying to influence scores on this scale in a positive direction will have a significant impact on neighbourhoods and community.

What is more, the results are relevant not only for the Vancouver Foundation but for a wide range of organizations and groups.

- Governments should be interested given the implications for civic participation.

- School boards should be interested given the relationship between our scale and attendance at school board meetings.

- Police departments should be interested given the powerful relationship between our scale and the extent to which neighbourhoods contain residents who are actively interested in their neighbours' welfare.

- Social service agencies should be interested given the relationship between our scale and the extent to which residents can forge meaningful personal relationships within a diverse community.

- Land use planners should be interested given the implications of our scale for the use of community spaces.

PUTTING THE PIECES TOGETHER

The most robust approach to identifying how organizations can influence residents to become more caring and involved is to develop a statistically reliable model for how change occurs.

The first step in this process was to identify constructs that our analyses and past research have shown drive engagement. In this process we were guided by our goal to include constructs that would represent a **bridging across groups** and **a bonding within groups**. In some cases constructs could be represented by a single variable. In other cases, as a result of factor analytic procedures, variables were combined to create a new construct.

The next step was to use a statistical technique that identifies the causal pathways between constructs and control for the conceptual overlap across variables. We chose Structural Equation Modelling (SEM) for this purpose. SEM tests hypotheses about the causal relationships between constructs while statistically controlling for the shared variance among these constructs. In so doing, some of the constructs that we test in the model may not emerge as significant causal drivers because they are not as strong as other drivers in the model.

Testing Causal Pathway Models with SEM

We used the IBM statistical software Amos (version 20) to test over 100 models, each one specifying a unique relationship between the social connections constructs (bonding and bridging) and our engagement construct—Caring and Involved Residents.

The process with SEM is always iterative because the goal is to determine which model best captures how the bonding and bridging constructs drive each other and drive the construct at the top of the model.

Note that all of the models we tested evaluated specific hypotheses regarding how the constructs may be related to each other. These hypotheses were derived from the survey findings themselves as well as from past research, particularly from the literature on social capital, regarding what constructs should be most relevant.

These hypotheses are represented as causal models that specify which bonding and bridging constructs have an impact on engagement, and how these constructs have an impact on engagement—directly or indirectly through another construct.

For example, one causal model could specify that conversations with neighbours—one of our bonding constructs—could have a direct impact on engagement. Another model could specify that conversations with neighbours could have an indirect impact on engagement; it could lead to greater trust among neighbours, which in turn could lead to higher engagement. A third model could specify that conversations with neighbours could have both a direct and indirect impact on engagement. A fourth model could specify that conversations with neighbours have no impact on engagement, but other social connection variables do.

Many causal models were possible because we had many social connection variables, with each one possibly having a direct, indirect, both a direct and indirect, or no impact on engagement.

Constructs in Our Model

After our extensive testing, we identified the following constructs that produced a model that fit the data well, and could inform specific actions for increasing both bridging and bonding within the community.

Bridging Constructs

The following were the bridging constructs that we included in our model.

Freedom from Discrimination. This was represented by a single survey variable—ratings on the survey item:

- "I do not experience discrimination in my day to day life." We intentionally did not define discrimination in the survey. We left it open so that it could mean discrimination on the basis of ethnicity, age, one's economic situation, one's appearance or disability status.

Sense of Belonging. This was represented by two variables—ratings on the survey items:

- "I feel welcome in my neighbourhood and feel like I belong here."
- "I feel welcome in metro Vancouver and feel like I belong here."

Connecting across Boundaries. This was represented by five survey variables—ratings on the survey items:

- "It is difficult to make new friends here."
- "I find myself alone more often than I would like to be."
- "Most people are tolerant of different ethnic groups, but most prefer to with people in the same ethnic group as themselves."
- "People who live here and don't speak English simply do not try hard enough to be part of the community."
- "The younger and older generations do not make an effort to get to know and understand each other."

This construct represents the sense that others—those of other ethnicities, language groups and age groups—are interested in forging meaningful relationships.

Bonding Constructs

The following were the bonding constructs that we included in our model.

Conversations with Neighbours. This was represented by a single variable:

- responses to the survey item measuring how frequently residents indicated having conversations with their neighbours.

Getting Together with Neighbours. The two questions assessing if neighbours have invited each other over to their homes were combined to create a new variable with three levels:

- neighbours have neither invited you over nor have been invited over by you
- one of the two has occurred but not both
- both you and your neighbours have had each other over (demonstrated reciprocity).

Trust Between Neighbours. This was comprised of two variables:

- responses to the question of whether or not most neighbours trust each other
- responses to the question of whether or not a neighbour has "ever left you with a spare key or told you where it is.'"

The Model Explained

The model illustrated on page (21) illustrates the two causal pathways that lead to the target construct we ultimately want to influence—Caring and Involved Residents.

The arrows represent both the direction and the strength of the relationship between the constructs. The construct sending the arrow is a driver of the construct receiving the arrow. Also each arrow has a path coefficient associated with it (e.g., .28). These coefficients represent the relative strength of the causal relationship.

To aid in interpretation, we have used thicker arrows to signify stronger drivers. Subsequent sections in this report provide further explanation regarding how to interpret path coefficients and how to compare the relative strength of drivers.

The bridging pathways are shown in green. The bonding pathways are shown in blue.

Again, there is overlap between the pathways. They are not independent of one another.
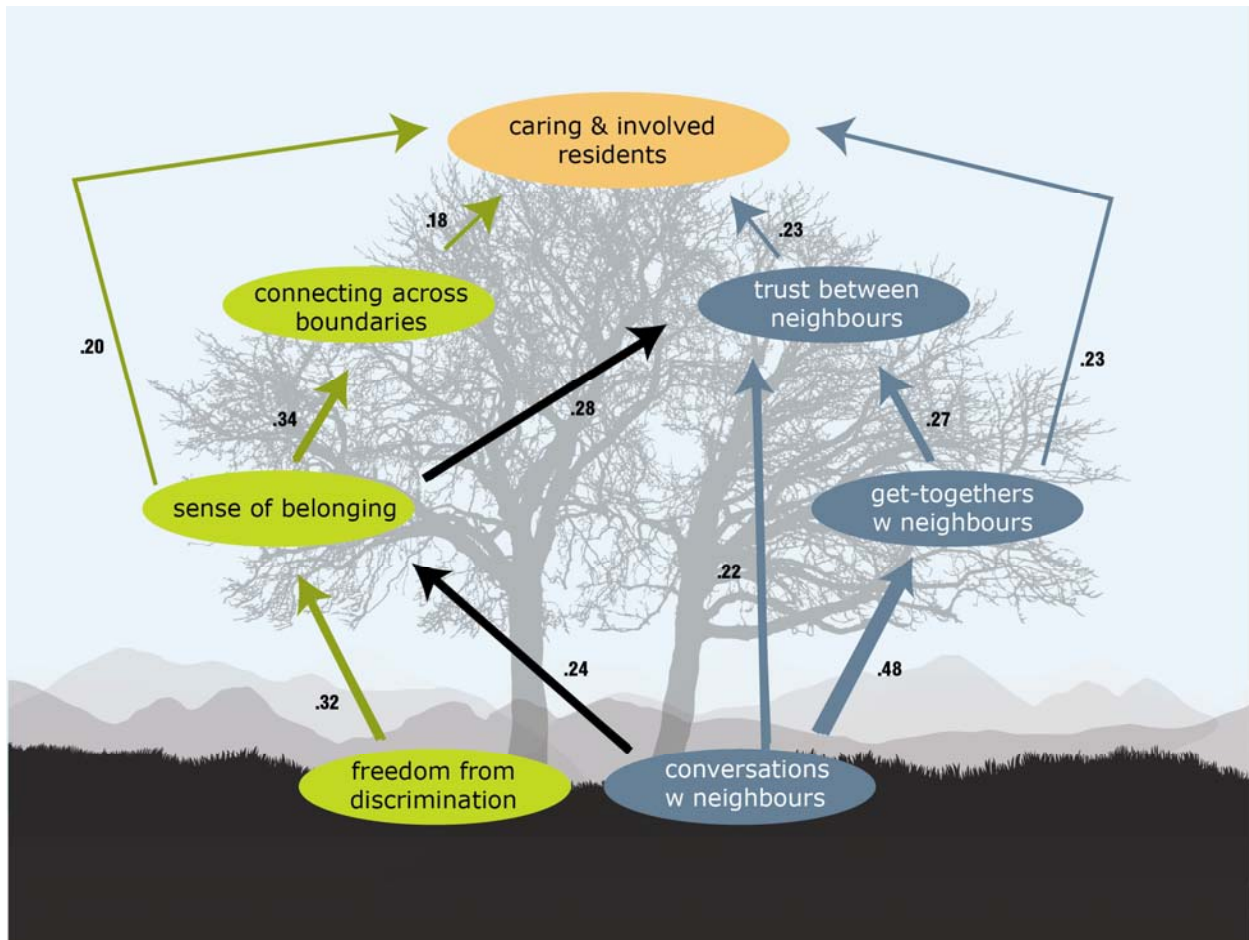
*Note: Freedom from Discrimination was represented by one variable—ratings on the survey item: "I do not experience discrimination in my day to day life." We intentionally did not define discrimination in the survey. We left it open so that it could mean discrimination on the basis of ethnicity, age, one's economic situation, one's appearance or disability status.

**Note: Conversations with Neighbours was represented by one variable--responses to the survey item measuring how frequently residents indicated having conversations with their neighbours.

***Note: Connecting across Boundaries was represented by five survey variables that represented the perception that those of other ethnicities, language groups and age groups are interested in forging meaningful relationships.

The Bridging Pathway

At the base of the bridging pathway is Freedom from Discrimination, whether that be based on ethnicity, age, one's economic situation, one's appearance or disability status.

This emerged as a powerful driver in our model and we were not surprised that the model worked best when we placed it at the base and evaluated how it influences other constructs. Only when we feel that we are treated equally by others can we begin to develop a sense of being part of the community. Feeling that one is being discriminated against is the key barrier, the first door that must be opened on the path to a sense of acceptance and a readiness to act for the greater good.

Freedom from discrimination fosters our sense that we belong. We feel part of a larger whole, not cut off from others. The need to belong is among the most fundamental human needs. Those who feel a sense of belonging feel safe, are more trusting and feel more at ease in forging relationships.

Those who do not possess this sense of belonging feel socially isolated, even if they are in close proximity to many people. They are guided by fear, anxiety, and mistrust. It is not surprising that sense of belonging in our model has a direct causal impact on trust between neighbours—a construct in the bonding part of the model.

Our sense of belonging has a direct causal path to connecting across boundaries. This latter construct represents our sense that those in other groups—those of other ethnicities, language groups and age groups—are interested in forging relationships with us, in building bridges across boundaries. When we feel that we belong we feel confident in crossing these bridges. When we feel we don't belong we assume others have little interest in crossing the bridge.

Caring and involved residents has two bridging pathways leading to it.

Our sense of belonging—feeling we are part of a larger whole—directly impacts the extent to which we care about the welfare of our neighbourhood and our optimism regarding the commitment of our neighbours to neighbourhood and community. In fact, this sense of belonging likely creates a greater sense of personal obligation to improve our neighbourhood and community.

Our sense that others want to connect across boundaries also leads to greater care and involvement. Feeling that other groups different than ours are interested in our contributions makes us motivated to work with those groups in the service of our community.

The Bonding Pathway

Our survey results showed consistently that very simple expressions of neighbourliness have a powerful impact on how we feel about our neighbourhoods and our neighbours.

For example, those who have conversations with their neighbours even just a few times a month are three times as likely to feel optimistic about the direction their neighbourhood is heading than those who have conversations with their neighbours a few times a year or less frequently.

We tested this conversations variable at the base of the bonding pathway of our model and found that it did indeed have strong direct and indirect effects on the other bonding constructs.

Having conversations with our neighbours—interactions that involve more than just a casual hello—has a direct impact on the extent to which we trust our neighbours. A conversation between neighbours is an act of sharing. We share ideas, opinions, and experiences. Through simple conversations we often find common ground—shared interests, perspectives and goals. This builds trust among neighbours. Conversations also impact our sense of belonging, which is why there is an arrow from conversations with neighbours directly to sense of belonging.

Conversations are also a step toward connecting with our neighbours in a closer way. We make the time to have our neighbours over to our home. They make the time to have us over to their homes. There still may be a fence between our homes. However, it is no longer a barrier. These neighbourly get-togethers also have a direct impact on trust. You've let me in. That must mean you trust me.

When we trust our neighbours we become committed to acting in their best interest. We are ready to get together to solve problems. We take collective steps to make the neighbourhood and community a great place to live. We care and get involved.

The bonding pathway may seem like a very obvious way to build neighbourhood connections and drive engagement. Given many residents' desire for stronger neighbourhood connections, we might then assume that many neighbourhoods would be initiating the simple kinds of activities outlined in our model, either through grassroots efforts or as a result of funding from a community organization. However, this is clearly not the case. Only a quarter of those interviewed as part of the Connections and Engagement survey indicated that they had been over to a neighbour's home in the past year.

CONCLUSIONS AND RECOMMENDATIONS

The Connections and Engagement Survey showed that the more often people talk to their neighbours, the higher the trust levels in the neighbourhood. People who do more than just know their neighbours' names, who do favours for each other and who go over to one another's homes, report higher levels of trust and are more optimistic that the ties in their neighbourhood are growing stronger.

Weak neighbourhood connections are associated with a lack of trust, and pessimism about neighbours' willingness to work together to solve local problems or make the neighbourhood a better place to live.

The survey also showed that people who report feeling isolated and alone are less trusting of others. They feel less cohesion with their neighbours, and attitudes toward community harden, leading to disengagement.

The survey also revealed the challenges of living in an increasingly diverse region. Over one-third of the respondents have no close friends outside their own ethnic group. Most agree that people prefer to be with others of the same ethnicity. In neighbourhoods with a

greater diversity of languages, there is a lower sense of trust and a lower sense that the neighbours would work together to solve local problems.

Our model complements the survey by showing the drivers that can change people's attitudes and influence their actions. Through the bridging and bonding pathways it shows *how* residents can become more caring and engaged.

The model also demonstrated *why* those who are interested in building vibrant neighbourhoods and communities should care about influencing the things we measured—and why they should be interested in moving residents from 0 to 1, from 1 to 2, and so on, on our Caring and Involved scale. It would be difficult to argue that those who scored higher on the Caring and Involved scale do not represent the types of residents that community leaders and government officials view as the strategic reserve that will keep the work of neighbourhood and community moving forward, even when funding to address a range of neighbourhood and community issues becomes scarce.

The drivers in our model point to the kinds of investments that can be made in the service of building a more caring and involved citizenry. However, not all the constructs in our model require an investment by Vancouver Foundation. For example, the survey showed that most people reported that they do not experience discrimination in their day-to-day lives. The survey also showed that most people feel a sense of belonging in both their neighbourhoods and in the larger community of metro Vancouver.

Vancouver Foundation is already doing work in these two areas and it may not be necessary to make further, substantive investments in either. We recommend that Vancouver Foundation maintain its funding in these areas and increase investments in the two areas where there are weaknesses.

The survey revealed that the weaknesses—the gaps—are in two main areas: connecting across boundaries and conversations with neighbours. One is on the bridging pathway and the other on the bonding pathway, although there is also some overlap. These represent the areas where there is opportunity to influence the outcome, meaning helping people become more connected and engaged; to become caring and involved residents.

Our model illustrates how the simple act of having conversations with our neighbours leads ultimately to our neighbours taking an interest in strengthening neighbourhood and community. These conversations lead neighbours to take the time to get together. This builds trust, which leads neighbours to become more committed to neighbourhood and community. These conversations also impact our sense of belonging.

Our model also showed that the assumptions we make about the interest of other groups in connecting with us impacts our motivation to care and become more involved. It appears that many of us are reluctant to take the first step in forging connections with those of different ethnicities, in different language groups and in different age groups. However, when we feel confident enough to cross the boundary—thereby eliminating it—we see shared interests and the power of collective action.

The relationships we identified can be applied to those groups that the survey showed as less connected and engaged, for example those aged 25 to 34 years old and people living in high-rises and suites in houses. We validated the relationships between the constructs across all of these groups, meaning that the drivers of becoming more caring and involved are similar within these groups. The task now is to find creative ways to bring people together, and perhaps to find ways of targeting these efforts at these less engaged groups.

At the beginning of this report, we showed that fewer than 30 per cent of survey respondents could be called caring and involved based on their scores on the Caring and Involved Residents scale. This means that, based on our scale, 70 per cent of residents of metro Vancouver are not connected and engaged, and are not involved in activities that can make their neighbourhoods and communities better places to live for everyone.

We hope that the model we have presented in this report will be used as a tool by the Vancouver Foundation, and other groups, to inform efforts to forge connections where there currently are none, to strengthen connections where they are weak and to build bridges across boundaries.

INTERPRETING THE MODEL STATISTICS

This section discusses the statistical robustness of the model, how to interpret the path coefficients and how to interpret the strength of the drivers.

Model Fit

We examined several model fit indices, and overall they indicate that the model represents or 'fits' the data[2]. We examined the chi-square statistic and although it rejected the model, χ^2 = 200, df = 10, p < .001, the chi-square is highly sensitive to sample size meaning that it always rejects models when the sample size is large, like our sample in our survey (n=3,841).

Other fit indices that are less sensitive to sample size, however, support model fit. These indices include root mean square error of approximation (RMSEA) = .07, with a 90% confidence interval between .06 and .08, as well as the standardized root mean square residual (SRMR) = .04, and the adjusted goodness-of-fit statistic (AGFI) = .97.[3]

Interpreting Path Coefficients

All the path coefficients are statistically significant (all ps < .001).

The numbers on the arrows are standardized path coefficients. They depict the strength of causal relationships—that is, the extent in which one variable has an impact on another-ranging from 0 to 1[4]. Some of the standardized path coefficients may seem relatively small (e.g., 0.22), leading some to conclude that they represent relatively weak relationships. However, these path coefficients are conservative measures of casual strength. They were calculated after statistically controlling for all other variables.

To illustrate, consider three variables in the model—conservations with neighbours, getting together with neighbours, and trust between neighbours. The path coefficients indicate that conversations with neighbours cause neighbours to get together (0.48), but has a smaller impact on whether neighbours trust one another (0.22). However, the 0.22 path coefficient indicates the impact of conversations with neighbours on trust between neighbours *after statistically controlling for the impact of getting together with neighbours.*

What if instead we simply looked at the impact of conversations with neighbours on trust between neighbours without statistical control? The path coefficient would be higher because it would include all of the impact that conversations with neighbours has on trust between neighbours, including the direct and indirect impact it has through getting together with neighbours.

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[2] Asymptotically-free distribution was used for estimating parameters and calculating fit indices as it is most appropriate for conducting structural equation modelling on survey data.
[3] For a review on what the fit indices are and their cut-offs, see Hooper, D., Coughlan, J. and Mullen, M. R. "Structural Equation Modelling: Guidelines for Determining Model Fit." *The Electronic Journal of Business Research Methods* Volume 6 Issue 1 2008, pp. 53-60, available online at www.ejbrm.com.
[4] For the statistically inclined, the standardized path coefficients indicate the change in the dependent variable in standard deviation units associated with a one standard deviation increase in the independent variable.

In sum, path coefficients are conservative measures of the strength of causality. Even coefficients that appear small are meaningful.

Comparing the Strength of Drivers

Readers may want to compare the strength of causal relationships by comparing the path coefficients with one another. For instance, the model shows that the trust between neighbours variable is receiving arrows from three variables: conversations with neighbours, getting together with neighbours, and sense of belonging. The question is which variable is driving trust between neighbours the most?

Examining the three path coefficients, one will see that the largest path coefficient is sense of belonging (0.28), followed closely by getting together with neighbours (0.27), and then by conversations with neighbours (0.22). However, concluding that a sense of belonging is the strongest driver of trust between neighbours would be premature because by only looking at these path coefficients, we have only examined the direct effects of the drivers; we haven't looked at the indirect effects.

An examination of the model reveals that conversations with neighbours has two indirect effects on trust between neighbours, one through sense of belonging, the other through getting together with neighbours. If the two indirect effects were taken into account when examining the strength of conversations with neighbours as a driver of trust between neighbours, the total effect would be higher than the path coefficient of 0.22. In fact, it would be 0.42.[5]

Because the total effect of conversations with neighbours (0.42) is larger than the direct effect of getting together with neighbours (0.27) and sense of belonging (0.28), conversations with neighbours is in fact the biggest driver of trust between neighbours, even though it had the smallest direct effect (0.22).

Therefore, to compare the strength of drivers, examining only the path coefficients between the driver and the variable we want to change is not sufficient because we would only be taking into account the direct effects, and not the indirect effects. Both effects need to be considered.

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[5] You can get the indirect effect of conversations with neighbours on trust between neighbours by multiplying the path coefficients connecting the two variables. One indirect effect is through getting together with neighbours, so that would be 0.48 x 0.27 = 0.13. Another indirect effect is through sense of belonging, so that would be 0.24 x 0.28 = 0.07. The direct effect is simply 0.22, the path coefficient linking conversations with neighbours with trust between neighbours. The total effect is the sum of direct and indirect effects, or 0.13 + 0.07 + 0.22 = 0.42.