The Robert Wood Johnson Clinical Scholars Program Yale University School of Medicine

A Preliminary Understanding of the Social Determinants of Health in New Haven and Using Data to Improve Health: A Report of the Robert Wood Johnson Clinical Scholars Community Solutions Project

A Project in Partnership with the New Haven Health Department and the New Haven Community Services Administration

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Executive Summary

Introduction

In recent years, interest has increased in understanding the social context within which individuals live and how factors in the environment influence health. In order to understand locally relevant factors influencing health, in 2007, the Robert Wood Johnson Clinical Scholars (Scholars), working with its community advisory committee, the RWJ Clinical Scholars Steering Committee on Community Projects (Steering Committee), the New Haven Health Department, and the New Haven Community Services Administration embarked on a project to identify: 1) what environmental factors New Haven community leaders thought most influenced the health; 2) what data might be needed to further understand these factors; and 3) how data could best be used to generate action to improve the health of New Haven.

<u>Methodology</u>

With the help of the Steering Committee, we designed a two-pronged approach:

A Survey of 250 Community Leaders

The survey focused on both individuals in traditional leadership roles (e.g., representatives of community-based organizations) as well as those in non-traditional roles (e.g., neighborhood leaders or local merchants). In the survey, conducted in both English and Spanish, we asked leaders to identify what they viewed as the social determinants of health and if they would be willing to participate in a follow up interview. We also were able to collect important demographic information on the participants in the survey. The survey response rate was 78%, with 195 community leaders responding. We used the survey results to select a purposeful sample for the follow up interviews.

In-depth Interviews with 30 Community Leaders

We selected interviewees to get a broad representation of race, ethnicity, gender, neighborhoods, self-defined roles in the community and a willingness to discuss in more detail the social determinants they ranked as important. We asked interviewees: 1) What type of information is currently available on the social determinants of interest? 2) What kind of information should be collected? 3) What makes information relevant and likely to be acted upon? and 4) What were the best ways to collect and disseminate information?

Analysis

Transcripts from interviews were recorded, independently transcribed and analyzed to elicit themes. The analysis took place through 3 coding teams, each of which included two Clinical Scholars, an RWJ Clinical Scholars faculty person and a community person.

Project Findings

Survey Findings

Of the 195 people who returned the survey, 46% identified themselves as minority; 59% were female; and of the 170 who provided their age, 68% of those were 45-65 years old;.

The majority of respondents were from community/neighborhood organizations and representative of the following neighborhoods: Amity, Annex, Beaver Hill, Dixwell, Downtown, Dwight, East Rock, East Shore, Edgewood, Fair Haven, Fair Haven Heights, the Hill, Newhallville, Prospect Hill, Quinnipiac, West River, West Rock, Westville, and Wooster Square/Mill River. The three most frequently cited social determinants of health were: education (70% of respondents), economy/economic health (68.6% respondents), and health/mental health (48.5% respondents)

Interviews on the Social Determinants of Health

We found widespread agreement that social and economic conditions are the upstream factors that influence downstream outcomes such as prevalence and severity of chronic illnesses. In general, community leaders in this sample endorsed the idea that the health of New Haven should be defined broadly and not limited to the absence of disease.

The social determinants of health most discussed included poverty or economic status, access to health services, housing, transportation, and education. The social determinant most mentioned was poverty.

"... you know that the poorer people get, the worse off they are in every single domain... it's interesting to think from a social view about whether you attack the specific things like safety for example or the environment or healthcare or whatever it is, or whether you try to deal with the poverty issue... I'm not sure I could say how society should go about dealing with poverty but my intuition tells me that that would be a really important thing to do. And that as poverty gets remedied to the extent that it can, then I think a lot of these things would fall into line; not all of them but certainly some of them."

There were several sub themes related to poverty:

- Poverty in New Haven leads to health problems in direct and indirect ways
- > Poverty leads to lack of access to good health care
- > Poverty in New Haven leads to suboptimal health insurance coverage
- ➤ Having an illness and no health insurance can lead to poverty
- Poverty in New Haven leads to limited access to healthy food
- People living in poverty often are subject to the worst environmental pollution and its health effects
- Poverty can lead to helplessness, substance abuse and HIV

Key quotes related to other social determinants:

❖ Housing

"... housing is a baseline because, I believe you cannot do any of this if you don't have housing... You are not going to be able to reach someone who is homeless. You are not going to be able to convince them to bring down their salt intake... if they are homeless. You have to have decent, safe, and sanitary housing and that is a minimum that we all need to have... when people have sleep problems, night terrors, it is because the mind just can't get down to a certain level of comfort. It can't turn off that watching around."

❖ Transportation

"I focused on transportation... because when we say to our folks 'we're going to

move you out in the community', where they live in the community, where they get placed in the community, whether or not they can get to their care providers is all based on transportation. And few, if any, of our clients who live here have cars. And even... a simple thing like missing the bus can put you at risk for failing your med regime or whatever it is."

❖ Education

"... it seems to me that if you have a good educational system and there are opportunities for the children then you get this nice generational boost each time, you know each generation goes through. Then you get sort of a pick up in the, the line of how well people are off and what kind of opportunities they have..."

Participants in the interviews suggested two important steps that should be considered in any efforts to address social determinants:

First, coordination of efforts

Community leaders interviewed point out that there are no easy fixes to these complex and multi-layered issues; they suggested the need to involve people in different roles in a central, coordinated effort for health to gain traction in the community.

"... To really bring community leaders, whether it's churches or other programs, together with the schools to really start dialogue and what we all need. And how whatever's basically reinforced outside the home and at school so that everybody's on the same page... it takes a village... it really does... New Haven is so wealthy with resources and yet the biggest problem I feel is... the lack of communication with people who are basically... trying to accomplish the same goals, but we're not all working together. And so people are doing scattered pockets of great work, but they're not all talking to each other. But I think if we all improve our coordination and communication skills, it would work a lot better for the families of New Haven..."

❖ Second, build on the existing assets in New Haven

Those participating in the project highlighted the many assets New Haven has to begin the process of addressing health issues and those societal factors that impact health:

- > There are high quality health centers in New Haven
- > The school system is active against obesity
- ➤ While there remains safety issues, the sidewalks throughout the city are potentially an asset for encouraging walking
- ➤ New Haven is a city where networking works

Interviews on Using Data to Produce Action

These findings review the themes that emerged when asked about the value of data in understanding the social determinants of health, how best to collect and disseminate data and what kind of information should be collected to address the social determinants of health that would generate action for improved health.

Collecting data is an important first step to change but needs to be focused Community leaders could see certain benefits of collecting new information or gathering publicly available data. Specifically, they agreed that data collection could be helpful to a

community in one of four ways: 1) for driving policy and setting benchmarks, 2) for obtaining additional grant funds, 3) for allocating existing resources, and 4) for raising awareness about existing programs and resources. Comments related to data collection:

- > Focus on best practices and measures of success
- > Data not tied to action is of limited value
- ➤ There's a need to distill information to increase its impact
- > Availability of data alone cannot promote change
- ➤ Leadership is needed to effect change not necessary more data
- > There is an ongoing need for a compilation of programs and services for referral and a need to reduce duplication of services

Currently available data has limitations

Although community leaders had mixed opinions about the merits of collecting new information, they were keenly aware of the limitations of already existing data.

- One basic limitation is not being able to accessing and using publicly available information
- > Even when available, data is not always clear to the consumer and the consumer's interpretation is not always correct
- Available data may be incomplete because of bias or manipulation in its compilation
- > There is a need to go beyond the numbers

Participants in the interviews pointed out a fundamental limitation of quantitative data when describing the health of a community, and encouraged the use of various forms of qualitative data and stories to aid in both understanding data and increasing its impact.

Practical strategies

In addition to the underlying issues, community leaders discussed practical strategies New Haven might use data to improve the health of the community:

- > Engage the community in research plans and dissemination to effect change
- Give back to the community when gathering data, particularly the results of data collected
- > Collaborate, coordinate, and centralize data gathering efforts
- Target dissemination, being strategic with regard to "who" might be interested in "what" results and "why" as well as know "where" to disseminate findings and "how"

Instructive summary tables related to the survey and interviews are attached to the end of this document.

Recommendations

The following recommendations derive from reviews of the findings from multiple groups—the Steering Committee, our community partners, and interview participants:

1. Enhance the community's capacity to use and interpret data

Efforts should be designed to improve the community's ability to use, manipulate, and interpret data. An informed citizenry has the potential to better identify community concerns and more effectively advocate for change.

2. Promote collaboration, dissemination and reciprocity around data

An understanding by all members of the New Haven community around the role information plays in the decision-making process and consensus around the appropriate methods for acquiring it could facilitate the acquisition and utilization of important data.

3. Strengthen DataHaven to be more consumer friendly

DataHaven could play a larger role in engaging the community, encouraging collaboration and increasing usefulness of local data.

4. Create a Research Assistance Office

To coordinate efforts around local data while improving the data interpretation skills of the community, New Haven could create research assistance office. This office could be housed within a city agency such as the New Haven Health Department or at DataHaven.

5. Improve communication about governmental meetings and legislative sessions Targeting dissemination of local data to political leaders was seen as an important element for bringing about change as was informing the community of important governmental meetings and alerting them of legislative discussions of bills to increase community can influence.

Post Script

During the time additional data was being analyzed (at the request of community partners), several exciting actions have taken place:

- ✓ The New Haven Health Department was selected as one of three city designees in
 Connecticut to create a Health Equity Alliance to reduce health inequities and recently
 hosted a community forum to begin engaging the community in setting a health agenda.
- ✓ DataHaven hired a project manager to increase its user-friendliness, collect New Haven specific data at neighborhood levels and serving as a clearinghouse of community resources addressing specific health and health-related issues.
- ✓ The Community Alliance for Research and Engagement (CARE) released a New Haven Health Data Atlas compiling all currently available social determinant and health data, some at the neighborhood level.
- ✓ CARE released guidelines on disseminating findings from community-based research projects and held a very well-attended workshop to discuss increasing dissemination and the translation of research into action/practice. This is being followed up by a series of hands on sessions for researchers and community members on different aspects of dissemination.
- ✓ CARE released guidelines on community/university research partnerships including ethical principles; they also held a workshop on these guidelines for both researchers and community members.
- ✓ CARE was successful in having New Haven appointed as the only US city for a
 multinational project called "Community Interventions for Health (CIH)" to address
 obesity, diabetes, and smoking—the three major causes for most chronic disease in the
 country and in New Haven. They have also received substantial funding to implement
 CIH from the Donaghue Foundation. This funding has allowed them to hire many New
 Haven residents to help with the project.

✓ One RWJ Clinical Scholar has used the findings from this project to develop consumer informed health education tools in partnership with New Haven Healthy Start to address issues identified in this study: a) obesity and weight management; b) reducing stress; and c) improving prenatal and postnatal health care practices.

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Introduction

The health of a community is affected by more than visits to doctors, health clinics and hospitals. In recent years, interest has increased in understanding the social context within which individuals live and how factors in the environment influence health. Instead of treating health behaviors solely as individual risks, made without regard to social factors, it is essential to contextualize health.

In order to understand locally relevant factors influencing health, in 2007 the Robert Wood Johnson Scholars (Scholars), working its community advisory committee, the RWJ Clinical Scholars Steering Committee on Community Projects (Steering Committee), the New Haven Health Department, and the City's Community Services Administration embarked on a project to identify: 1) what environmental factors New Haven community leaders thought most influenced the health of New Haven; 2) what data might be needed to further understand these factors; and 3) how data could best be used to generate action to improve the health of New Haven.

In the beginning stages of this work, a common local concern regarding community health assessments voiced by community members was that though much effort is expended in collecting information and the information is rarely acted upon. Our hope was to be mindful of this fundamental challenge and to address it by using a community collaborative approach to produce actionable, reliable, locally relevant health and social determinant information in conjunction with and for the New Haven community.

Based on a series of informal individual meetings with community representatives and meetings with our Steering Committee, we focused our efforts on understanding "social determinants of health," the broader social and economic forces that affect health. Further, using examples of successful initiatives in other cities we proposed to start from the "ground up" and determine directly from community leaders the kinds of information they would find most relevant, useful, and actionable.

This project involved two stages. First, we surveyed a cross section of community leaders identified by our Steering Committee and others. Some of these leaders had formal leadership titles and others were without official leadership titles but identified by the Steering Committee as influential and knowledgeable about community issues. To gain a more detailed perspective on the issues identified in the survey, the second stage of the project consisted of a sample of in-depth interviews, from among those who participated in the survey. Analysis of these in-depth interviews revealed several themes detailing specific social determinants and their relationship to the health of individuals and the health of the community as well as themes related to the collection and use of data for improving the health of New Haven. A review of the themes with supporting quotes from the interviews will be the primary focus of this report. The findings will be presented in two parts. Part I will summarize the findings related to collecting and using data for action.

Intended Audience

Our specific aim was to inform future efforts to clarify health needs that seek to improve the health of New Haven by collecting and tracking health-related data. However, our findings are applicable to any citizen or organization interested in using data to effect community change. Examples of our intended audience include local government officials and service agencies, non-profit community-based organizations, funders, and researchers involved in community-based research.

The Research Team

The core team was comprised of eight Yale University School of Medicine physician researchers known as Robert Wood Johnson Clinical Scholars and their faculty mentors. Primary community partners were the New Haven Department of Health and the New Haven Community Services Administration. The project was also overseen and guided by the Steering Committee. All parties were involved in the design and implementation of the project, reviewing early drafts of this report prepared by the Scholars and making recommendations for action.

The New Haven Data Atlas Project

In February of 2007, the leadership of the Health Department, working with a new Yale affiliated research entity, the Community Alliance for Research and Engagement (CARE), mounted a complementary study compiling existing quantitative data on health indicators. CARE and the Health Department contracted with DataHaven to collect the relevant information. The Director of the New Haven Health Department then convened a workgroup to coordinate both studies, adding other members to this coordinating group, the Yale-Griffin Prevention Research Center and Community Foundation of Greater New Haven. The New Haven Data Atlas is in the process of being released to the community.

Methods

Initial Survey

With the help of the Steering Committee, we identified community leaders, focusing on both individuals in traditional leadership roles (e.g., representatives of community-based organizations, alderpersons) as well as those in non-traditional roles (e.g., neighborhood leaders or local merchants). We designed an internet-based survey and sent it to the identified community leaders by email. We also sent a paper version of the survey for those without easy access to the internet. Both were translated into Spanish. Using a snowball approach, we asked survey participants to suggest names of other community leaders who were subsequently sent the survey. We gave participants the option to conduct the survey orally in Spanish with a native Spanish-speaking member of our research team. We ultimately identified 250 individuals. We sent several follow-up emails and letters to non-responders. At the close of the survey, the survey response rate was 79%, with 195 community leaders responding.

Key Informant Interviews

One question on the survey asked participants about their willingness to be interviewed as part of the second stage of the project. From the survey respondents, we selected 30 individuals for in-depth interviews. The selection process for the interviews drew a purposeful sample to get representation based on willingness to speak about a certain topic, race, ethnicity, gender, self-defined role in the community, and neighborhood.

We developed an interview guide that asked participants to elaborate on the top three social determinants they identified on the survey. We were also interested in the following questions: 1) what type of information is currently available related to the social determinants being discussed? 2) What kind of information should be collected? 3) What makes information relevant and likely to be acted upon? 4) What are the best ways to collect and disseminate information? The interview guide was reviewed by the Steering Committee then piloted with three community members and revised for content and clarity.

Each participant was interviewed in-person, one-on-one with a member of the research team. The interviews were digitally recorded and transcribed verbatim by an independent transcription service.

Coding, Analysis, and Participant Confirmation

All transcripts were coded (a line-by-line categorization of ideas). After several iterations and refinement of the codes, the transcribed results were entered into Atlas.ti software, a qualitative data management and analysis program. To gain community-based insight for the coding phase, we included community members on each of the three coding teams. The transcript analysis generated several themes detailing specific social indicators and the relationship between the health of the community and these indicators. After compiling the results from our initial analyses of the transcripts, we convened a participant confirmation meeting at City Hall where we invited feedback from our interview participants, the Director of the Department of Health, and the Community Services Administrator. At this meeting, we presented the themes and concepts generated from the transcripts and provided excerpted quotations to illustrate those themes. We asked the participants to comment on our analysis: to agree, disagree, or elaborate on our analysis. In general, participants validated our interpretation and offered additional supporting examples.

Limitations of the Study

The scope of the study was limited due to time constraints of the Scholars. These constraints limited the number of interviews Scholars were able to conduct and analyze while they were in New Haven as well as the breadth and depth of the analysis. The results presented here only highlight some of the main findings. There is a body of data that will continued to be tapped by future RWJ Clinical Scholars interested in understanding the social determinants of health in New Haven. This study represented an initial attempt at engaging selected community members in discussing the social determinants of health. Most of the participants were staff of community organizations which meant that some were not always citizens of New Haven. New efforts now underway by CARE and the New Haven Health Department in their Health Equity Alliance project are beginning to more widely engage all sectors of the community in conversation about health issues and potential actions.

Part I – Preliminary Findings on the Social Determinants of Health in New Haven

Survey Results

As a whole, the 195 survey respondents (79% response rate) expressed familiarity with almost all of neighborhoods in New Haven, including Amity, Annex, Beaver Hill, Dixwell, Downtown, Dwight, East Rock, East Shore, Edgewood, Fair Haven, Fair Haven Heights, Hill Newhallville, Prospect Hill, Quinnipiac, West River, West Rock, Westville, and Wooster Square/Mill River. Females (59%) and middle-aged (46-65 years old) individuals represented the majority of respondents. Of those indicating their racial/ethnic background,

46% identified as being part of a racial/ethnic minority group, namely, Black, non-Hispanic, Hispanic/Latino, or more than one race. Respondents occupied a number of roles within the community, including government officials, elected and appointed, members of the faith community, and representatives of community/neighborhood based organizations, funding agencies, health/healthcare/mental health, and educational disciplines. As a whole, most respondents served in community/neighborhood-based organizations.

Themes from In-depth Interviews on the Social Determinants of Health

There was a strong consensus that "social conditions affect health."

In this community, as represented by the opinion leaders we interviewed, we found widespread agreement that social and economic conditions are the upstream factors that influence downstream outcomes such as prevalence and severity of chronic illnesses.

In general, community leaders in this sample endorsed the idea that the health of New Haven should be defined broadly and not limited to the absence of disease.

The social determinants of health most discussed included poverty or economic status, housing, transportation, access to health services and education. We begin with the issue most mentioned—poverty. There were several subthemes that elaborated on the theme of poverty.

* Poverty

"... you know that the poorer people get, the worse off they are in every single domain... it's interesting to think from a social view about whether you attack the specific things like safety for example or the environment or healthcare or whatever it is, or whether you try to deal with the poverty issue... I'm not sure I could say how society should go about dealing with poverty but my intuition tells me that that would be a really important thing to do. And that as poverty gets remedied to the extent that it can, then I think a lot of these things would fall into line; not all of them, but certainly some of them."

Poverty in New Haven leads to health problems in direct and indirect ways

"My belief is that it is going to be difficult to have health in general if you do not have economic health. Economic health is an important factor in medical health, particularly since we live in an economy, a monetary society where you have to buy or purchase your health..."

"We know that poverty relates to all kinds of health issues... we see how that impacts issues of housing, issues of healthcare access... nutrition, many kinds of environmental factors are related to where our clients... live and how they access resources in the community. So I think that's all a fundamental guiding issue. You can't talk about a city like New Haven as one of the poorer cities in the nation, a city in one of the wealthiest states in the nation and not think that there's [not] a relationship between that and all the other kinds of health indicators, such as our infant mortality rate and other aspects."

Poverty leads to lack of access to good health care

"I think you want to correlate a couple of things—the number of people who have health care, the number of people who have insurance, the number of people who have a primary care physician... I would assume that if someone has a primary care physician that should result in a lowering of the emergency room usage. In my ideal world, I would be putting a lot of emphasis on a primary care physician for someone's health... It seems that the biggest issue for hospitals is the irrational use of its services; basically meaning emergency room service. That is not good service to both, the patient and the doctor because... you can't do preventive health there and I firmly believe that is what you need to be doing. You just cannot do that in an emergency room setting..."

"No one wants to do primary care. This article here talks about the numbers... Maybe New Haven can do something about it in conjunction with the medical schools, seeing how there is a need in the city... if there is a way of having better access to primary care physicians... for a patient... to have that person who is a little more knowledgeable about medicine and health. Again, I am using health broadly... in the sense of prevention and what we know about prevention and getting people to exercise more, getting people to cut down on and make dietary changes... just getting information that is in the research lab or already known into practice by the medical profession is astounding as well. There are lots of challenges there... Assuming that people can get that information to the docs and to the clinical settings faster, it is clear that the docs have an unbelievable effect on their patients. They can get them to reduce their salt intake. They can get them to get more exercise. They can get them to do things that are better for the mind."

> Poverty in New Haven leads to suboptimal health insurance coverage

"Well just because of the economic disparities in the communities of New Haven and most of the areas that I work in are, are poor. They afford limited access to health insurance."

"There's so many kids that move a lot or their phones get disconnected and they're supposed to get notified from HUSKY that—they have to provide them with this document or they're going to be, they're terminated services... so this happens and then the kid gets a sore throat and they go to the doctor and they're like, 'we terminated you. You don't have HUSKY anymore. You know, you turned 18 last month and, you know, we dropped you.' And then the kid doesn't get seen. And that's huge. It's the lack of coordination of healthcare providers and the insurance piece. That's a huge problem for families... It might even be like well, my father got a new job so I don't have insurance for three more months. So they kind of just wing it... there's not people that kind of connect the dots for people... often times it's only once a girl gets pregnant that she actually can even have access to coverage..."

Having an illness and no health insurance can lead to poverty

"... when you're poor, something like a child becoming ill with no insurance throws your whole life around and certainly effects your ability to maintain stable housing."

"... this issue about people's ability to pay for their healthcare. How available are things for these people who are near poor. How much access do they really have? Things like sliding fee scales. What happens to them when they get sick? Just the

amount of debt that they get into. How much do they lose? Basically, being ill is not something you can avoid... I don't think people get enough of a sense of the fact that there are working people in this country who are sort of there for the grace of God go I, that something catastrophic happens and suddenly everything is gone; how much we all live by a thread and that they are not people who are not working. There are people who are actually trying to scrape by an existence or maybe doing actually reasonably well and all it takes is one huge catastrophic illness and you are done."

Poverty in New Haven leads to limited access to healthy food

"I mean you know they've got like you know corner bodegas or whatever that we'll just go into and there's not like a good quality... and it contributes to like the, the obesity in children and things like that."

"I mean these, these, the economic status of, of the folks affect almost everything in their lives. It relates to the, to the type of foods that's available to them to eat so they don't eat healthy. The healthier foods cost more. We throw in a whole paycheck to some health foods market... So to get to the healthier foods cost more so the main things that are naturally available at the rates that they can afford: they're fast foods, they're heavy cholesterol and high fat content, high sugar. All the things that are really bad for you."

"And you have in a community like New Haven problems with both under nutrition and over nutrition. Very often within the same neighborhood, sometimes within the same family, where you have a malnourished child and an overweight child, or you have an overweight mother and a malnourished child. You have lots have different combinations of these things and people wonder why you have poverty driving both under and over nutrition. And the under nutrition is pretty intuitive. You don't have enough money to buy good food and you have these other pressing needs like paying for your rent and things like that that get in the way of buying food for the family."

"And then there's some educational issues about whether people know what the best food is to buy, but then there's also access issues of course. And what you find in the inner city and this has been talked about more and more in recent years is two basic problems. One is there's lack of access to healthier foods in a lot of parts of the country and, and New Haven is a little bit better off than the average city of its type, but still it's a problem."

"... for the country as a whole and New Haven included that it's harder to get healthy food than it is unhealthy food. Just think of the drive-in windows, the little mini markets, what's in vending machines and you know what you can find in every gas station with its own little market and those things are all over the place and accessible to everybody. Fast food restaurants in high density and poor neighborhoods and things, so that's all there and it's pretty hard to find healthy food. Now maybe you're lucky and you live close to the supermarket and you can walk there, but that's of course a minority of people. And maybe you're, you know, you're within five blocks of Edge of the Woods or something, but otherwise you're stuck, and so that's a big problem."

People living in poverty often are subject to the worst environmental pollution and its health effects

"I think, I think the environment around Connecticut, around New Haven is getting better, but you know our environment, certain cars, the amount of trucks that go through. You know the buses that are belching all kinds of crap into our air. The traffic... the coal generating plants in the poorest section of the town, the most powerless. Our reliance on sources of energy that are, that are fossil-fuel based... and the cleanliness of the whole disposal of trash on the streets which brings rodents, are all kind of things that affect the health..."

Poverty can lead to helplessness, substance abuse and HIV

"New Haven's HIV and AIDS population... are the urban poor. So they've been infected with HIV through the consequences of poverty... one of the features of poverty could be a sense of helplessness... lack of capacity to get out of the trench that they're in. And so, for many of them, seeking drugs, and substance abuse, has been a huge part of that life. And through that, they became infected with HIV and AIDS or that was just sort of part and parcel of the whole thing."

* Housing

Another determinant raised in the interviews was housing. The following highlight comments shared in the interviews.

> High quality housing is harder to find for some populations

"Most landlords do a background check and really don't want anyone that's coming out of prison. So they're often housed in rooming houses that are substandard for sure. People dealing with substance issues and mental health issues equally is difficult because the housing market is so tight landlords would rather rent to someone who appears to be fairly stable without issues."

"Clients may be living... without heat, lights going off, termites, cockroaches, and many times they're afraid to even say anything to the landlord or if they do they might come and fix it in their own time or they might not. And then of course the tenant would have to get the housing department involved to come out and do an inspection and they're very hesitant of course to do that because that's their ticket right out of that property."

Housing impacts health

"One's home in a community is such a fundamental point of, of self center, of what happens in your life, in terms of where you go to work or school and come back to every night... The quality of many aspects of your life are impacted by quality of housing and we've seen housing become less and less and less affordable. Some of the barriers to housing that had been reduced over time have reemerged. So that we have lots of people in our community who don't have access to adequate housing, and that impacts their health in many ways."

"... housing is a baseline because, I believe you cannot do any of this if you don't have housing... You are not going to be able to reach someone who is homeless. You are not going to be able to convince them to bring down their salt intake... if they are

homeless. You have to have decent, safe, and sanitary housing and that is a minimum that we all need to have... when people have sleep problems, night terrors, it is because the mind just can't get down to a certain level of comfort. It can't turn off that watching around. Most of us can do that because we have homes and we have police... There is a measure of safety."

"You know when, when new housing is built, are the stairs accessible, well lit, and safe so people don't have to rely on elevators to get from one floor to another? Are, are, are housing places developed in areas where there're recreation opportunities nearby? How safe are they and all those sort of things?"

> Location and access to services of housing is important

"I mean if you think about West Rock and I think there was study many, many, many years ago and I remember reading about this in the paper, where the incidents of, of death due to like heart attack was higher because the ambulances have to go you know so far out to West Rock. And, and it's in such a more isolated area."

"... housing per se is not always the answer, particularly for the populations that end up being homeless. It's housing with support. And so it's probably much more important to look at the number of units that are being developed that have supportive housing services attached to them or some quantification of what people like the partnership would determine would be the need for supportive housing. Usually if they're counting homelessness, they're going to add to that the need for supportive services because generally people fall into homelessness because of a whole series of determinants or other issues going on. And so supportive housing is a new way of describing the way to capture and address the issues of homelessness."

❖ Transportation

Transportation was seen as an important link to addressing health and economic issues.

> "Transportation dovetails with issues of the economy and economic health"

"For me, the issue of transportation dovetails with the issue of the economy and economic health... For me, the issue of transportation is one of being able to get people to jobs. That is the primary issue. The secondary issue is the environment—just to cut down on the number of cars... For me, the issue of transportation is being able to get people... from the inner city to jobs because a lot of jobs have been migrating out into the 'burbs, and getting people from the 'burbs into the city, getting people out of their cars as much as possible... I just want to see more people using mass transit and making sure that it is affordable so that people, who need jobs and need to get to jobs, can get to their jobs."

> Transportation is critical to one's health

"I focused on transportation... because when we say to our folks 'we're going to move you out in the community', where they live in the community, where they get placed in the community, whether or not they can get to their care providers is all based on transportation. And few, if any, of our clients who live here have cars. And even... a simple thing like missing the bus can put you at risk for failing your med regime or whatever it is."

"... we have a nurse practitioner who's been overseeing an array of patients who have left here... things that she sees are interruptions in that climb to wellness if you will. So she, for example, might document that, you know, three times out of ten my clients have trouble getting to the physician's office because of transportation issues or something like that... it's not that commuting transportation system. It's really the spider work of services that are here to serve people who don't have their own transportation, public—anyway... It's a little thing, but it can be the undoing."

"Where in some neighborhoods you just can't find healthy food and if you don't have a car, which poor people may not have, then you have to walk to whatever is near by and those tend to be the small corner stores, the bodegas and things like that. And because of the stores' own set of economic circumstances, they can't buy in bulk, they can't handle a lot of perishable foods so they tend to have canned, packaged type foods that'll be high in sugar, fat, and salt. And so that means that poor families are driven to under-eat on one hand, but when they do have money to buy food, to buy the high-calorie fast foods because of the cost. It costs less than healthy foods so that's the first of the two problems, and then access as I mentioned before is the second. So, in some ways you've got this blue print that almost guarantees a bad diet in people who aren't wealthy enough to afford good food."

❖ Education

Participants not only agreed that the path to chronic illnesses such as obesity and diabetes often begins with limited social resources, but that other indicators of community health such as educational attainment are under the influence of the same socio-economic factors.

Need to focus on education

"... it seems to me that if you have a good educational system and there are opportunities for the children, then you get this nice generational boost each time, you know each generation goes through. Then you get sort of a pick up in the, the line of how well people are off and what kind of opportunities they have..."

> There are impediments to education

"... in the nutrition area... one of the big challenges but also opportunities, is to get people aware of how important this is. So for example, the New Haven schools felt that it was important enough to take out the soft drinks, which is a really good move. And so, you've got to believe that the kids are having healthier beverages in the schools. Now is it worth their while doing more? Is it worth their while really paying attention to what's in the school lunch, what's in vending machines besides the soft drink ones and... is there nutrition education going on in the schools? Well if it's only important to the extent it affects the bottom line and the bottom line for most schools are standardized test scores. So, if you could convince the schools that whether the kids are adequately nourished is going to affect how they perform on tests, then they would pay attention to this, and it becomes an opportunity for them."

"Maybe what some of the impediments to education [are], things that are more social. Things like not being able to have computer access in the home. Parents that don't really understand the importance of it or the barriers that kids have in their own surrounding environment that may actually impact negatively on their education. Probably also parents' ideas of what they think should be happening with

education and how do they fit into the big picture. Where do they see themselves? Because I think you need both. You can have very engaged kids, but if their parents don't have a clue, it is not very helpful for them."

New Haven Community Leaders Offer Suggestions to Make Things Better

There are no easy fixes to these complex and multi-layered issues; community leaders suggest that while all efforts need to involve many different players a central effort for health could help gain traction.

Coordinate efforts

"To really bring community leaders, whether it's churches or other programs, together with the schools to really start dialogue and what we all need. And how whatever's basically reinforced outside the home and at school so that everybody's on the same page... it takes a village... it really does... New Haven is so wealthy with resources and yet the biggest problem I feel is... the lack of communication with people who are basically... trying to accomplish the same goals, but we're not all working together. And so people are doing scattered pockets of great work, but they're not all talking to each other. But I think if we all improve our coordination and communication skills, it would work a lot better for the families of New Haven..."

"... why should the department of education care about nutrition? So people do better on tests. Why should the environmental people be interested? Because sustainable food becomes a real issue. And why should transportation people be interested? Because you want people walking and biking more. So there are all these different connections with nutrition that you wouldn't automatically think are important, but really are. So, so having some sort of a central effort might help bring these parties together more than what's happening now."

❖ Build on New Haven Assets

Those participating in the project highlighted the many assets New Haven has to begin the process of addressing health issues and those societal factors that impact health:

> There are high quality health centers in New Haven

"... we do have clinics that are good... do good quality work there."

The school system is active against obesity

"... New Haven schools were one of the first school systems to take out the soft drinks and they've been pretty active on this front."

While safety issues still need to addressed, New Haven has a ready made walking infrastructure

"And the energy expenditure is very important as well... you have this basic declining of physical activity in general in the population... communities not set up to be very walkable. New Haven is different because it's sort of an older city with sidewalks."

New Haven is a city where networking works

"... I see that there's a lot of networking in the city of New Haven. My experience has been if I have somebody who's hungry I can call someone and have a contact, someone that needs a job, I can call someone and say do you have any leads. Someone that has an issue with education, their child, it's all about networking... If we don't talk with each other and set some kind of good relationships to collaborate with each other, it's not going to happen."

Part II - Using Data to Improve the Health of New Haven

This section of the report addresses the themes that emerged when asked about the value of data in understanding the social determinants of health, how best to collect and disseminate data and what kind of information should be collected to address the social determinants of health. A table summarizing all the data needs community leaders identified can be found in Appendix E.

Collecting data is an important first step to change but needs to be focused

A project designed around gathering data as a first step generated much discussion among our participants. Community leaders could see certain benefits of collecting new information or gathering publicly available data. Specifically, they agreed that data collection could be helpful to a community in one of four ways: 1) for driving policy and setting benchmarks, 2) for obtaining additional grant funds, 3) for allocating existing resources, and 4) for raising awareness about existing programs and resources.

Focus on best practices and measures of success

This participant from a community-based organization relates how information about best practices is necessary for program development:

"I think information about evidence-based practices is important. It helps people like me and others who [...] are in a position to shape program development. It helps us know [...] about interventions that have been proven more effective. I think having some information about broader social forces is helpful in the kind of advocacy that we might do."

Others agreed that measurement is important to help target efforts and resources to where they are needed the most. Interviewees highlighted the importance of measurement in allocating limited resources according to program effectiveness. In many of our interviews, participants pointed out a lack of knowledge of both the existing community-based organization-run programs in New Haven and the outcomes these programs have achieved. Community participants endorsed the need to track program outcomes through an indicators project as a means to appropriately distribute available resources and advocate for additional funds to improve the health of New Haven, as illustrated in this quote from a member of a community-based organization:

"You [have] to have measures of where we're at and what we're doing. I mean is it worth our time what we're trying to do? Because if not [we've] got to go somewhere else, we either cover that hole [or] go on with trying to develop another program. Or just tell people that they need to change gears and go in another direction [...] They should have a target [...] a threshold if you will, so I think there are times when

you're not meeting your goal. You begin by going [to the legislature] and knocking on the door and say, 'We're not meeting the goals'."

❖ Data not tied to action is of limited value

Our sample of community leaders also pointed out problems related to the usefulness of data collection. Many felt that data collection in itself is of limited value in the absence of plans for generating community action and for increasing the community's capacity to interpret, analyze and present these data. One community leader with expertise in education cautioned that many of the problems highlighted by data collection are already known to the community as areas in need of improvement. Any future indicators project would need to go beyond data collection and ensure that policymakers and community leaders are prepared to act on the findings. A participant from the education field summarized it this way:

"If it's out there sitting in a database somewhere [...] then it's worth the trouble to go find it, but if it's not, then you could spend a lot of time and effort and money to prove what you already know: these are big problems. On the other hand, if it's a way to get the attention of public officials so they deal with the issue, then we need to do it [...] Otherwise, if they kind of know it's a problem already, proving it's a problem doesn't seem to be worth the cost."

There is a need to distill information to increase its impact

Community leaders with access to program-specific data distinguished between having the information needed to run their programs and being able to use that information to effect wider change in the community. They also highlighted the importance of being able to distill the meaning and implications of any information collected and made available to the public.

"I'm in favor of people having access to data but I think it would also be important simultaneously to help people unpack data because... if you are not in the field... you don't actually understand what's going on."

Interviewees felt that the current funding and service provision model promotes collecting information without first deciding if it will help close important knowledge gaps in the community. This approach creates a scenario where agencies are engaged in data collection activities and before the collection effort has borne fruit in terms of illuminating social or health conditions, or service needs, they move on to another effort that involves additional data collection. It also generates fatigue in the community because residents are interviewed frequently for different projects without knowledge of the objective and without tangible benefit.

* Availability of data alone cannot promote change

Even if existing data was accessible, complete, trustworthy and easy to use, some participants doubt that data alone can promote change. They point to a cultural climate where information is abundant and yet New Haven is still experiencing a significantly lower socioeconomic and health status than would be expected for a city with its resources. If a data project is to succeed in improving the health of this community, it must grapple with the competing demands and information overload common in modern society, as expressed by a local community-based organization representative:

"The current theory is that if you give people more information, they'll be able to use it more beneficially. That's the most recent marketing myth to prevent social uprising. So the plethora of websites, the plethora of these multi-channels, rather than seeing really significant movement in America, people's attention frames are fractured... To bring critical masses together on one or two pulse issues becomes even a greater challenge."

Leadership is needed to effect change

A portion of our sample thought that currently available data should be sufficient to effect change and that additional data collection or presenting existing data in new ways will not compensate for the lack of leadership necessary to improve the health of New Haven. A member of a community-based organization summed up the sentiment in this way:

"Policymakers have as much data as they need to act on, I think the action is crystal clear, it's the courage and the integrity and the commitment that's lacking. There's no more data that we need, that I'm aware of, we collect it because it's routine, uniform, and one has to do it, but there's no more data, we don't need a single piece of additional data to impact what should be happening."

Community leaders in New Haven agree that a project that assesses indicators of health would be useful in maximizing the existing efforts of community-based and government agencies, but were less uniform in their belief that additional data can galvanize lasting positive change in this community. The fragmentation among provider agencies and the lack of transparency on their outcomes further decreases the probability that data will improve the health of New Haven. Even though our project participants could express how an indicators project would help advance the mission statements of their individual programs, they were not convinced about how such a project could serve the broader mission of changing health conditions in New Haven.

Currently available data has limitations

Although community leaders had mixed opinions about the merits of collecting new information, they were keenly aware of the limitations of already existing data.

> One basic limitation is not being able to access and using publicly available information.

In explaining this limitation, a community-based organization representative said:

"One of the frustrating things is knowing you need something and if it's not really available might spend hours taking a look and still not come up with what you are looking for."

In our sample, however, data access was not a widespread barrier. As part of their community work, leaders accessed state and national data mostly on the Internet but felt that currently available data on New Haven failed to illuminate neighborhood-level issues. In addition to the lack of detail, they felt that available data was hard to use and interpret, and difficult to trust due to perceptions of bias in its collection.

The issue of how available data sometimes lacks enough detail is demonstrated when considering neighborhood summary statistics. In this example, a community-based

organization representative explains how knowledge of the median income for one neighborhood can obscure differences between sectors within a neighborhood:

"If I were to go to [a specific data housing website], it would give me [...] readings that make it look like that neighborhood is doing quite well, but then... I find out that people on the east side have household incomes in excess of \$200,000. People on the west side have household incomes in excess of \$20,000. When I look at the neighborhood as a whole it's going to come out saying that the average income is \$55,000. And you're thinking, 'well, that's okay,' but it's really not."

In general, community leaders pointed to areas of deficiencies in currently available data that they wished an indicators project would help fill. These deficiencies included New Haven-specific statistics on issues ranging from domestic violence to chronic disease prevalence.

> Even when available, data is not always clear to the consumer and the consumer's interpretation is not always correct.

As noted by this community leader with education expertise, statistics are always subject to context and negotiation between the effected constituencies:

"I'm in favor [of] people having access to data but I think it would also be important simultaneously to help people unpack data because right now the way 'No Child Left Behind' is requiring data to be reported and the politics behind that [...] If you're not in the field [...] you don't actually understand what's going on."

Lack of contextual information is not the only barrier to accurate data interpretation. Our sample of community leaders acknowledged their limited statistical analysis skills as a barrier to the use of existing information. A leader from the education field expressed how consumers—both community-based organizations and the public—may not have the skills to interpret available data, hence limiting its utility to improve the health of New Haven.

"I think it's more a question of who has access or who knows how to get that information. It's out there if somebody knows how to get it but, for instance, many of our parents don't know how to access that information... They may not have the skills."

> Available data may be incomplete because of bias or manipulation in its compilation.

This generates lack of trust for the data and for the agency that makes it public decreases the information's power to encourage community-based interventions. Crime and education statistics were given as examples of data that can be both incomplete and of questionable quality in the eyes of the community. This lack of trust extends past the data itself to include the agency or group generating the information. Participants gave examples from various research efforts to support their discontent with data gathering approaches they consider of low scientific merit or disorganized.

"It behooves [...] the chief of police to keep crime down. So depending on how things are in the city, people have a tendency to downgrade what is really happening in the city for two purposes: first, statistics and data, and the other one is to keep the alarm rate down in the neighborhoods."

> There is a need to go beyond the numbers.

Participants in the interviews pointed out a fundamental limitation of quantitative data when describing the health of a community, and encouraged the use of various forms of qualitative data to aid in both understanding data and increasing its practical impact. A representative from a community-based organization illustrates the importance of using qualitative data with respect to crime:

"You would have to do some qualitative research around attitudes and perceptions. Statistics around crime are available at both the police department and statewide because they have to record these things. I think though that this doesn't mean anything, and I think it needs to be interpreted and sort of linked to personal day-to-day life experience. [It's too] sensational or easy to dismiss, oh, that's in New Haven, or that's in Bridgeport, so we don't have to..."

Community leaders emphasized that when thinking about data, numbers only tell part of the story and will not, by themselves, effect change. When thinking about collecting data and using it to make change, personal anecdotes can be very powerful, as described by this member of a community-based organization working with the homeless:

"I think there are two types of information. One is more aggregated, community level information and the other is personal through individual experiences... Hearing from individuals about what was your life like and what happened and what is the difference now. What has changed, say, since you have been in housing or since you have been able to not have to live on the streets and live your private life in public settings; what is different about that. I guess there are two kinds of information, and I guess I would approach it that way."

Participants felt that an essential component of data collection project should not simply ask traditional survey questions and measure frequency and prevalence, but also to ask how and why situations came to be, and gather personal stories to complement and further explain numeric trends.

> There is an ongoing need for a compilation of programs and services for referral and a need to reduce duplication of services

While this issue doesn't relate directly to data collection, it was on the minds of a number of individuals we interviewed. Many interviewees felt frustrated about the duplication of services and encouraged the development of an information-gathering project dedicated to listing available agencies and programs in New Haven to avoid "reinventing the wheel". A community-based organizational leader said:

"This is where you're going to see what needs to be implemented or what needs to be fixed. You know, maybe some of the services already exist, but people don't know they exist and people don't know how to access those services, so this is a matter of knowing what's out there. And maybe developing a directory, you know, with information about how to access the services, and who has what."

In summary, community encouraged future data collection efforts to drive policy and allocate resources more efficiently, but cautioned that data collection in itself would be insufficient to improve the health of New Haven. In addition, they relayed their frustrations with currently available data about New Haven. These opinions and cautions serve as a

foundation for our understanding of how community leaders perceive any indicator projects for New Haven. They also set the stage for a more complete discussion of the characteristics such a project would need to have in order to effectively improve the health of this community.

Practical Strategies

In the interviews, community leaders discussed practical strategies to be considered when using data to improve the health of the community. We grouped these ideas into four general areas or *practical strategies:* 1) engage the community to effect change; 2) give back to the community when gathering information; 3) promote collaboration between disparate citywide entities; and 4) target the dissemination of findings.

Engage the community to effect change

Community leaders clearly stated that early, thoughtful engagement of the community in data collection and/or release of findings were essential in order to effect change in New Haven and that engagement must occur on multiple levels. As a leader of a community-based organization pointed out, it is essential to engage the public in such a way that people cannot ignore the message. When asked how to approach dissemination of research findings, he said:

"Well there's no one way. It's got to be from a variety of ways. It's got to be frequent. There has to be a way to slap, wake up, pay attention. I could see something shocking coming out, that gets everybody all awakened. But you can't just put it in the paper. You can't just send out flyers. There has to be conversation about what it really comes down to, to a face to face. And getting into the minds of everyone. Of as many people as possible. Whatever it takes, just get it out there."

In addition to engaging the public, participants emphasized the importance of engaging of decision-makers:

"You know we're going to do surveys and we're going to do this and that and have a web site, but I want it to make a difference, and here's what we're going to do. And then you start thinking through a public relations strategy. How could you engage Yale in this? Do you want the mayor's office involved in this? What about the press conference when the stuff comes out? How do you want to frame it?"

Furthermore, in order to use data to effect change and improve New Haven's health, our participants emphasized engaging the community in a particular cause. Whatever the data may reveal, they stressed the importance of publicizing findings in such a way that the public at large, as well as public officials would be inspired to take action.

❖ Give Back

We heard from interview participants about the importance of giving back. When people offer data, something must be given in return. Community leaders provided several different examples of ways to give back; foremost was to bring back the results to the community from which the data was gathered.

"I sense that we go about collecting information, but that's it. We collect information and we never send it back... Too much is collected... but not... brought back."

Participants also voiced concern in circumstances when data reveals a problem in the community. In this case, offering solutions was described as another way to give back:

"So if people don't have access to healthy foods in poor neighborhoods, well what do we do? Is the solution to get big super markets to come into poor neighborhoods? Well, what does that take zoning changes, tax incentives, enterprise zones? If not enough people are walking and biking, well, okay, we need more walking and biking paths. But where's the money going to come from? So it'd be nice if there was some remedy for each of the problems that was identified."

Furthermore, many participants described the importance of synthesizing the data to identify problem areas and come up with solutions prior to dissemination.

Collaborate and coordinate

Community leaders conveyed the importance of centralizing and coordinating the various efforts to improve community health. They stressed the importance of bringing together resources of various organizations that may be focused on similar issues. We learned from the interviews that New Haven currently lacks meaningful collaboration, as described by this representative from a community-based organization:

"[The community has] to see the common ground and to come together around that common piece. That is something that is really important locally... I think that my biggest regret in New Haven over the last couple of decades is I do not see that happening enough. I think it is very hard for that to happen in New Haven. I think there are very entrenched different sectors in the city. It is really difficult for people to come together. I mean I can count on one hand the number of times I have been in the room and I have seen real diversity—what I would consider to be real diversity across race, class, age, and all of that."

Nevertheless, community leaders believe that opportunities for collaboration do exist as related by this individual in the education field.

"Why should the department of education care about nutrition? So people do better on tests. Why should the environmental people be interested? Because [using locally grown] food becomes a real issue. And why should transportation people be interested? Because you want people walking and biking more. So there are all these different connections with nutrition... having a central effort might help bring these parties together more than what's happening now."

We heard from other community leaders that this kind of potential exists around many other issues as well. We also heard specific examples of successful collaboration that has occurred in specific sectors within New Haven. For example, various community organizations share Ryan White funding in order to improve access to care for patients with HIV, and certain neighborhoods and the New Haven police force share information about crime in order to increase neighborhood safety. Overall, we learned that leaders in New Haven endorse the idea of citywide collaborations and feel that change cannot happen without it. However, major impediments to collaboration include lack of trust among agencies and competition among community organization for limited resources.

Target Dissemination

When we asked community leaders about how to best publicize the findings of an indicators project, we heard from them that dissemination should be strategic and consider who, what, when, where and why. Interview participants gave several examples of how information could be targeted during distribution. This representative of a community-based organization described the importance of targeting to a specific audience:

"Now you're starting to see more Mexicans, more South Americans, and that is certainly still Hispanic... but the demographics are very different. Then how you would frame a message to a Puerto Rican might be very different from how you would frame it to Hondurans and Ecuadorians. So I think that knowing those shifts is really important and studying those are important, particularly when you're thinking about messaging something or working in a community."

This community leader emphasized the importance of knowing the demographic and cultural characteristics of the audience who will be receiving data, so that the information can be optimized and targeted appropriately. We also heard about the importance of timing and framing an actionable message in order to attract the attention of policy maker, a member of a community-based organization put it this way:

"The ideal time to present to policy makers is during the legislative sessions around key bills. So you almost need to have someone tracking bills and then explaining when is the legislature on, what sort of committee with influence over a particular issue, and then making sure that people who are going to be providing information are accurately informed... That's a way of getting important information to people that influence policy."

This participant described the importance of not only timing with dissemination, but also the importance of targeting to a specific issue in order to influence those who have the power to act. With respect to disseminating data, participants underscored the value of publicizing information strategically using a well-timed and audience-sensitive approach focusing on a specific issue.

Recommendations

We presented the results of the qualitative interviews related to data collection activities to multiple groups, including the RWJ Steering Committee on Community Projects and the Community Solutions Workgroup (now the Health Equity Alliance Planning Team). We asked them, "Based on our findings, what concrete recommendations can we make to ensure data is used to effect change in New Haven?" We compiled their recommendations and incorporated responses from the participant confirmation meeting.

1. Enhance the community's capacity to use and interpret data

Efforts should be designed to improve the community's ability to use, manipulate, and interpret data. An informed citizenry has the potential to better identify community concerns and more effectively advocate for change.

Expanding the ability of the community to comprehend and use data is a prerequisite for advancing community engagement and can be accomplished in several ways. One step would be to increase opportunities for community members to acquire these skills through workshops incorporated into current initiatives. For example, the City of New Haven runs a Democracy School every fall that is in its fifth year of serving as a pathway for participating residents to increase their leadership and involvement within the community. A single session could be incorporated into the Democracy School curriculum on the basics of accessing and analyzing data from available resources.

2. Promote collaboration, dissemination, and reciprocity around data

Our study suggests that data alone will not be a remedy for the challenges facing New Haven. However, an understanding by all members of the New Haven community around the role information plays in the decision making process and consensus around the appropriate methods for acquiring it could facilitate the acquisition and utilization of important data.

The community has the right to demand local data collection efforts be inclusive with the opportunity to voice concerns around collection methods, dissemination and utilization of the data. Increased recognition by researchers of the benefits of including stakeholders throughout the process is needed. Fulfilling this tenet requires increased community participation in the planning and development of projects through oversight by steering committees or including community members on the research team. Researchers should strive to develop these relationships in all local data collections efforts in New Haven and the community should come to expect opportunities for involvement.

Additionally, funding agencies and foundations need to expand their support for collaboration efforts within the community. Dissemination strategies should be included in project proposals and should be considered a necessary part of the approval process for community based research projects by institutional review boards.

Lastly, where possible, researchers and granting agencies should adopt a policy of reciprocity emphasizing the importance of returning solutions or recommendations for improvements back to the community.

3. Strengthen DataHaven to be more user friendly and useful

DataHaven could play a larger role in engaging the community, encouraging collaboration and increasing usefulness of local data. Many of the leaders interviewed had interacted with the DataHaven website and felt it to be an important first step. However, there was a consensus that additional resources would be needed to develop the interface for improved usability.

Several priority areas were identified by community leaders for strengthening DataHaven. First, there is a need to be able to stratify data by race, gender, and other demographic characteristics were considered essential. Some of these capabilities exist currently in DataHaven but many users felt they lacked the necessary skills to extract information from the databases contained on the website. Second, the data on the website should strive to be as locally relevant as possible, with many requests for block level data if possible. Achieving information of this specificity will require additional research efforts from key constituents in the New Haven community. Other communities, such as Baltimore and Seattle, have met this challenge with community surveys organized, funded, and carried out with the concerted effort of multiple stakeholder agencies.

Lastly, in addition to providing data, many envisioned the DataHaven being a repository for on-going studies within the New Haven community. A single source could catalog efforts to prevent duplication, inform the community of current research activities and highlight areas needing attention. Similar efforts exist at the federal level for NIH funding via the Computer Retrieval of Information on Scientific Projects (CRISP). [http://crisp.cit.nih.gov/] Like expanded access to data, an up-to-date catalog of current research activity would accrue benefits to many segments of the New Haven community, including academic researchers, community service organizations and the general public.

4. Create a Research Assistance Office

To coordinate efforts around local data while improving the data interpretation skills of the community, New Haven could create research assistance office. This office could be housed within a city agency such as the New Haven Health Department.

In addition to the provision of technical expertise, the research assistance office could also serve as an "honest broker" for local data. An advisory board of local leaders could work to reduce bias in the delivery of the data. Similar efforts have been developed nationally to help educate participants better understand their participation in clinical research trials prior to providing consent. The office could also help to explain and possibly promote standardization of definitions for local data elements. DataHaven could expand their role to serve in this capacity.

5. Improve communication for governmental meetings and legislative sessions

Targeting dissemination of local data to political leaders was seen as an important element for bringing about change. Finding a way to inform the community of important governmental meetings or to alert them of legislative discussion of bills around specific issues is paramount to ensuring the community can exert influence with newly developed data skills and local information. Capitalizing on new technological advances that allow information to be "pushed" to interested members of the community via email, text message or through social networking systems might be one solution. Others may develop out of local efforts to engage citizens via interactive maps or websites such as SeeClickFix (www.seeclickfix.com/).

Improved communication between the community and legislative leaders around issues informed with local data could have several benefits. Community members can provide context for the data that may be obscured when viewing only the raw numbers or figures. Insight by those most directly affected by the problems being examined will hopefully improve the solutions ultimately enacted. The improved relationship might also lead to the development of a research and health promotion agenda for the city or region. While skill development for the community and infrastructure to promote collaboration are necessary generally, many respondents felt the need to ultimately tackle only a handful of key areas at a time. This strategy can prevent community efforts from being spread too thin by helping to prioritize needs, focus resources and ensure success is achievable.

This study and the response of the community to the findings suggest that New Haven is seeking action on all of these items. Fortunately, prior efforts by many groups have created a good foundation on which to build. Hopefully, this report can spur further leadership on these issues from the city, Yale University and the New Haven community as a whole.

APPENDIX A

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APPENDIX B

RWJ CLINICAL SCHOLARS PROGRAM AT YALE UNIVERSITY STEERING COMMITTEE ON COMMUNITY PROJECTS

Sharon Bradford, MSW Assistant Director for Education, Stone Academy

Laurie Bridger, MD Medical Director, Fair Haven Community Health Center

Beth Comerford, MS Deputy Director, Yale-Griffin Prevention Research Center

Maria Damiani, MS Director of Women's, New Haven Health Department

Jeannette Ickovics, PhD Professor, Yale Department of Epid & Public Health and Director of CARE (Community Alliance for Research and Engagement) of the Yale Center for Clinical Investigation (YCCI)

Jean Larson, **MBA** Community Outreach and Education Coordinator, Yale Human Investigation Committee (Yale IRB)

Kristin Mattocks, PhD, MPH, Deputy Director, Veterans Aging Cohort Study

Joanne McGloin, M.Div, MBA Associate Director, Yale Program on Aging

Natasha Ray, Consortia Coordinator, Healthy Start Program, Community Foundation of Greater New Haven

Marjorie Rosenthal, MD Assistant Professor, Pediatrics and Assistant Director, Yale Clinical Scholars Program

Lois Sadler, PhD, RN Associate Professor and Assistant Dean, Yale School of Nursing

Gary Smart, MBA Director of Special Projects, Yale New Haven Hospital

Amos Smith, MSW Executive Director, Community Action Agency of New Haven

Barbara Tinney, MSW Executive Director, New Haven Family Alliance

Sandra Travino, MSW Executive Director, JUNTA for Progressive Action

Stephen Updegrove, MD, MPH Pediatrician, Coordinator for Community-Based Research, Hill Community Health Center and Advisor, New Haven Public Schools

Dorothy Ventriglio, BA Administrative Director for the Geriatric Center of Excellence, the Hospital of Saint Raphael's

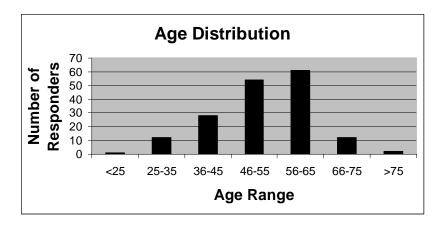
Maurice Wiliams, Outreach Coordinator, Community Alliance for Research and Engagement

APPENDIX C

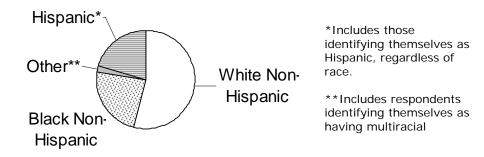
Survey Results

Demographics

A total of 195 leaders in the New Haven community responded. Of those who indicated their gender, 59% are female and 41% are male. Of the 170 respondents who indicated their age, the majority are in the 46-65 year range.

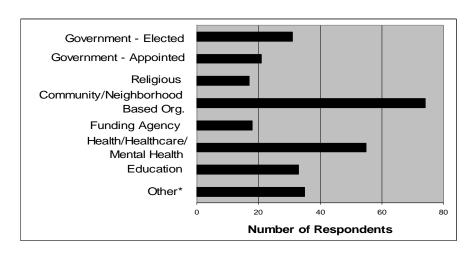


The racial/ethnic distribution of the 165 respondents who indicated race/ethnicity is shown here. A total of 46% of respondents identified themselves as minorities.



Roles within the Community and Neighborhood Familiarity

Respondents occupy various leadership positions in the New Haven area, as shown below.



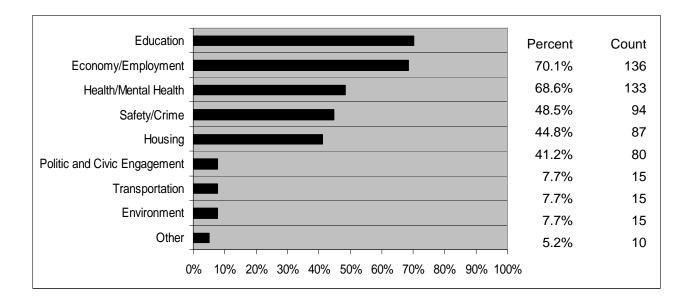
*The "other" category included, but was not limited to, non-profit organizations, businesses, and social services organizations.

As a whole, the group is representative of all of the following neighborhoods: Amity, Annex, Beaver Hill, Dixwell, Downtown, Dwight, East Rock, East Shore, Edgewood, Fair Haven, Fair Haven Heights, Hill, Newhallville, Prospect Hill, Quinnipiac, West River, West Rock, Westville, and Wooster Square/Mill River.

A total of 79% of the respondents indicated that they are willing to be interviewed for the New Haven Health Indicators Project. In all, thirty interviews were conducted.

Social Determinants of Health in New Haven

When asked what issues are most important to the health of the city of New Haven, respondents indicated that education and economy/employment are most important. Though these two categories were selected most often, several other factors are also considered to be important social determinants of health, as shown below:



APPENDIX D

Currently Available Data			
Education	School wellness policies		
	Readiness Council		
	New Haven Schools		
Economy/Employment	 State of Connecticut—Welfare 		
	 Department of Social Services 		
	Chamber of Commerce		
Health/Healthcare/Mental	New Haven Health Department		
Health	Infant Mortality Data		
	MMWR—State report		
	 Department of Public Health 		
	HIV Data—clinics/hospitals		
	CBO database on HIV		
	• CDC		
Housing	Healthy Start		
	Livable Cities		
	State Housing Website		
Safety/Crime	NHFA—Male Involvement Network Data		
	 US Department of Justice 		
	 New Haven Police Department 		
	Crime Reports—management teams		
	Department of Social Services		
Overall	Data Haven		
	Census		

APPENDIX E

Types of Data Needed			
Education	 How can we put programs that help kids stay educated School dietary information Dropout rates/expulsions by grade Assessment of after school programs Utilization/need for Healthy Start Services available from school based clinics 	 High school dropout rate College entrance rates Standardized test scores, SAT, CMT Social impediments to education Computer access at home 	
Economy/Employment	 Household incomes Number of new businesses in New Haven Number of business bankruptcies 	 Area Median Income (AMI) List of companies in New Haven Reasons for business relocation 	
Health/Healthcare/Mental Health	 HIV Transmission Rates Barriers to healthcare Rates of driving while intoxicated or under the influence (DWI/DUI) Prenatal care/access Chronic disease use of hospital system Hemoglobin A1C Levels Cholesterol/hypertension control Mammogram rates Colon cancer screening rates Pap smears Health literacy Vaccinations Food availability/cost Survey of mental health in New Haven 	 Link to mental health and mortality Adverse childhood experiences Burden of disease/years lived with disability Mortality Exposure to domestic violence Access to emergency department care Access to primary care Utilization of Hill Health/Fairhaven/YNHH clinics Limitations to access, language barriers, transportation, cost, education Obesity Exercise frequency Food prices List of health-insurance programs # uninsured in New Haven 	
Housing	LocationConditionAffordabilityAccess to housing	 # Absentee/out of area landlords # of units available to working poor How long working poor can remain in a rental unit Safe housing/stairs 	

Abandoned buildEnough rentalsRental Scale	• Owner occupied homes		
• Rental Scale			
Typical cost of f	Foreclosures—reasons Agamsia for homological for homolog		
Typical cost of 1			
Locally owned p			
	ut people leaving • Assess confidence in police		
the prison syste			
	gement teams get • Is it safe to exercise/walk in certain neighborhoods		
from police	Safety of parks/recreation		
	feel safe walking • Reasons for underreported crimes		
in neighborhood			
Access to fireari	ms		
Accidents			
	ers in New Haven		
Environment • Pollution by neighbors			
Survey of the en	nvironment, parks, • Environmental factors that might affect health		
biking paths, et			
Transportation • Understanding v			
does not suppor	t use of public • Ways to make use of transportation easier		
transport			
Challenges of ru	Challenges of running more public		
transport/fundir	ıg?		
Political and Civic • Data on funded			
Engagement • Number of nonp	rofit agencies • List of organizations and activities		
Neighborhood level data • Which areas are	Which areas are bearing the burden of poverty, lack of education, lack of insurance		
Outside of New Haven • # of people using	# of people using NH resources from outside New Haven		
Benchmarking • Sometimes help	ful to have comparison data		
Special Populations			
Children/Youth • What kids are d	What kids are dealing with on a daily basis?		
Youth crime			
# of slots in Infa	ant/toddler programs		
Immigrants • # of immigrants			
	Os affected community		

 $^{^{\}star}$ Please note that this list is a partial list and not inclusive. There is significant overlap

APPENDIX F

How to Collect Data			
Format	Locations	Data must be:	
 Like census—more frequent Focus groups* Surveys* Environmental survey Phone calls—even though labor intensive Door-to-door By zip code/neighborhood Person to person important* Use community service agencies Have requirements for physician reporting Ways to improve response	 Churches* Laundromats Health Department Schools Health fairs Parent teacher meetings Library Supermarkets Mental health clinics Places of employment Emergency rooms Fast food restaurants Senior centers Shelters Target	 Readily accessible Use existing agencies Available by neighborhood Concerns: Schools can not afford to collect without help Door-to-door can be dangerous Mailed surveys have problems with literacy/language Getting honest answers is hard Need independent body Not everyone has a phone 	
 Keep short Provide lunch/dinner/reimburse-ment voucher Need to have trusted people collect* Leaders/clerics/alderpeople/local community-based organizations Media support Go to content experts for 	 Immigrants Youth Poor Cross sectional data/different ages 		

^{*} These suggestions came up most frequently and were suggested by several participants

APPENDIX G

How to Disseminate Data			
Modalities	Locations	Data must be:	
 On-Line Data Haven Website Press GIS TV—make it personal Advertisements Publish Press conference Email – fan alert about crime Presentations 	 Churches Health fairs PTA meetings Library Supermarkets Block watches Target Elected officials Board of Alderman To affected groups Parents 	 Readily accessible Use existing agencies We should have: Independent body to collect and disseminate Central clearinghouse 	
 "The State of New Haven" Theater piece Workshops on available data Campaigns to educate Personal contact United Way Presentations Through mayors office Through Police Dept 	 Parents Management teams 		

APPENDIX H

Thank you for participating in this survey. The survey will take less than five minutes to complete, and your responses will be kept confidential.

We plan to share the results of the survey with you once we have collected and analyzed the data. We may contact you for an interview after you have completed the survey.

This project has been approved by Yale University's Human Investigation Committee, which is a group that ensures that the rights and privacy of research participants are protected.

Si usted desea completar este breve cuestionario en español, favor comunicarse con nosotros

al 203-785-4293.	,
1. Please select the <u>three</u> topics that you feel are most important to the nealth of the City of New Haven:	3. Are there specific New Haven neighborhoods with which you are more familiar? (Check all that apply)
O Education	
O Economy/Employment	O Amity
O Health/Healthcare	O Annex
O Housing	O Beaver Hill
O Safety/Crime	O Dixwell
O Environment	O Downtown
O Transportation	O Dwight
O Political and Civic Engagement O Other (please specify)	O East Rock
O Other (please specify)	O East Shore O Edgewood
	O Fair Haven
	O Fair Haven Heights
	O Hill
2. Which of these best describes	O Newhallville
	O Prospect Hill
your role in the community? (Check	O Quinnipiac
all that apply)	O West River
0. 0	O West Rock
O Government - Elected	O Westville
O Government - Appointed	O Wooster Square/Mill River
O Religious O Community or Neighborhood Based	
Organization	4. Would you be interested/willing
O Funding Agency	to be interviewed for this project?
O Health/Healthcare/Mental Health	
O Education	O Yes
O Other (please specify)	O No
	5. Would you prefer to be interviewed in Spanish?
	O Yes
	O No
	J 140

Next Page -

6. If you would be willing to be interviewed, which topics would you	10. What is your age group?
be interested in talking about with	
us?	O Less than 25 years
	O 25-35 years
O Education	O 36-45 years
O Economy/Employment	O 46-55 years
O Health/Healthcare	O 56-65 years
O Housing	O 66-75 years
O Safety/Crime	O Greater than 75 years
O Environment	
O Transportation	11. What is your race? (Check all
O Political and Civic Engagement O Other (please specify)	that apply)
1 37	O White
	O Black or African American
	O Asian
	O American Indian or Alaska native
	O Other (please specify)
7. Are there any other New Haven community leaders with whom you think we should speak?	
O Yes	12. Are you Hispanic/Latino/Latina?
O No	O Yes
	O No
8. If so, please specify. Please	
provide us with the name of the	13. If you selected
person (or people), role in the	Hispanic/Latino/Latina, how would
community, and contact	you describe your ethnicity?
information, if at all possible.	(Check all that apply)
information, if at an possible.	(oncontain mat apply)
	O Mexican, Mexican American/Chicano
	O Puerto Rican
	O Cuban
	O Other (please specify)
	o other (piedse speelig)
9. What is your gender?	
O Female	
O Male	

Thank you for taking the time to complete this survey.

APPENDIX I

Intro:

In an effort to improve the health of the people of New Haven, we are looking to community leaders, such as yourself, to help us identify the health and related social issues that need to be addressed, and the best way to jointly develop approaches to address them.

Many factors contribute to a person's health status, beyond physical and cognitive function. These other determinants of health can broadly be defined as the economic, environmental, political and social conditions that impact lives and affect health. We are very interested in learning about your views on the determinants of health that you believe are of greatest concern for the New Haven community. Do you have any questions before we get started? Icebreakers:

- 1. Please tell me how long have you been working at... And briefly describe your role.
- 2. How long have you lived in the New Haven area?

		t the list of topics that was mai	3 . 3
	•	, and 3)	•
<i>Probe:</i> W	hat are some of the re	easons you chose these 3 issue	es?

Now I'd like to talk more in detail about these topics individually.

- 4. With regard to 1)_____:
 - A. What, if any, information on _____ in New Haven is currently available to you?

Probe: If they give an answer, then follow with: How useful is this information?

Probe: If no answer or don't know: Refer to laminated cards for "available data"

B. What would be useful/worth pursuing for New Haven?

Probe: Do you see any gaps? How could we fill these gaps?Probe: Refer to laminated cards for "Sample Questions/Indicators"

C. If this information were available, how could it be used to improve the health and well-being of the community?

Probe: e.g., legislative action, change in city agency policy, funding allocation, funding opportunities.

D. [Optional, if it has not already been covered]: How could information be most effectively gathered from the community in this domain?

Probe: For primary data: landline call, cell phone, street corner, neighborhood kids going house-to-house, church or other community groups

	Ε.	Is there anything else you would like to discuss about?
5. With	re	egard to 2):
		What, if any, information on in New Haven is currently available to you?
		Probe: If they give an answer, then follow with: How useful is this information?
		Probe: If no answer or don't know: Refer to laminated cards for "available data"
	В.	What would be useful/worth pursuing for New Haven?
		Probe: Do you see any gaps? How could we fill these gaps?
		Probe: Refer to laminated cards for "Sample Questions/Indicators"
	C.	If this information were available, how could it be used to improve the health and well-being of the community?
		<i>Probe</i> : e.g., legislative action, change in city agency policy, funding allocation, funding opportunities.
	D.	[Optional, if it has not already been covered]: How could information be most effectively gathered from the community in this domain?
		<i>Probe:</i> For primary data: landline call, cell phone, street corner, neighborhood kids going house-to-house, church or other community groups
	Ε.	Is there anything else you would like to discuss about?
		egard to 3): What, if any, information on in New Haven is currently
•	Λ.	available to you?
		Probe: If they give an answer, then follow with: How useful is this information?
		Probe: If no answer or don't know: Refer to laminated cards for "available data"
	В.	What would be useful/worth pursuing for New Haven?
		Probe: Do you see any gaps? How could we fill these gaps?
		Probe: Refer to laminated cards for "Sample Questions/Indicators"
I	C.	If this information were available, how could it be used to improve the health and well-being of the community?
		<i>Probe</i> : e.g., legislative action, change in city agency policy, funding allocation, funding opportunities.
	D.	[Optional, if it has not already been covered]: How could information be most effectively gathered from the community in this domain?
		<i>Probe:</i> For primary data: landline call, cell phone, street corner, neighborhood kids going house-to-house, church or other community groups
	Ε.	Is there anything else you would like to discuss about?
		u for your input on these three important issues. Now we would like to hear your on how this information could be collected and shared across the community.

7. Who should data be gathered from?

Probes: specific neighborhoods, empowerment zones, social service agencies, all of New Haven

8. If data were to be collected how could we best make this information available to the community and community leaders like yourself?

Probes: interactive website, press releases, regular written reports, community forums, libraries, other public repositories of information (church "libraries" and reading rooms)

9. In thinking about information that could be collected, how important is it to be able to compare this New Haven-specific information to statewide or national benchmarks?

Probe: e.g., is it important to collect data on obesity in such a way that it could be compared to national statistics?

10. [OPTIONAL]: How can we track perceptions of bias (e.g., racism, sexism, ageism, other forms of discrimination) on the health of the community?

Probes: *Examples of questions/indicators from other surveys:* "Have you been discriminated against at work, at the doctor's office, at school because of sex, age, marital status, race, religion, nationality, disability or for any other reason?"

11. [OPTIONAL]: What resources that contribute to (or help) the health of the community should we keep track of over time?

Probes: In Housing: Acres of park per neighborhood area
In Political/Civic Engagement: # volunteers in the public school system per year.

12. Based on what we discussed today, can you think of other individuals we should contact if we need further input?

ECONOMY- Sample questions/indicators:

- 1. Median household income
- 2. Percent of individuals below poverty
- 3. Percentage surveyed who are currently working for pay?
 # of months since you last worked for pay
- 4. Number of visitors to city per year
- 5. Net migration of young adults, unmarried, college educated

Available Data (Source):

Data collected (most recent):

# of units & workers employed in each sector (CT Dept. of Labor)	annually (2005)
Average annual wage by industry (CT Dept. of Labor)	annually (2005)
Unemployment rate (CT Dept. of Labor)	monthly (4/2007)
Labor Force (CT Dept. of Labor)	monthly (4/2007)
Cost of living index (Council for Community and Economic Research)	quarterly (1/2007)
Tax rates (property) (City of New Haven Off of Tax Collector)	annually (2007)
Median household income (US Census)	decennial (2000)
Homeownership rate (US Census)	decennial (2000)
Persons below poverty as a %, 1999 (US Census)	decennial (2000)
Per capita money income as a %, 1999 (US Census)	decennial (2000)

ENVIRONMENT- Sample questions/indicators:

- 1. Percent area covered by trees
- 2. Number of reported incidents of rats per 1,000 people
- 3. Changes in air quality, particulate matter concentration

Available Data (Source):

Data collected (most recent):

Superfund sites (EPA)	(2005)
Toxic release sites (EPA)	(2005)
Water dischargers (EPA)	(2005)
Air emissions (EPA)	(2005)
Hazardous waste (EPA)	(2005)
Impaired water bodies and impaired streams (EPA)	(2005)
UV Index (EPA)	(2007)
Children with high lead levels (DataHaven)	Yearly (2001)

TRANSPORTATION- Sample questions/indicators:

- 1. Residents within 10 minute walk to transportation system by age, race, income
- 2. Cars per household

Available Data (Source):

Data collected (most recent):

of flights and passengers in CT Airports
Commuting-workers commuting for 30 min or more (US Census)
Commuting- workers commuting in other than single occupancy
vehicle (US Census)

Every 10 years (2000) Every 10 years (2000)

HOUSING- Sample questions/indicators:

- 1. Mortgage foreclosures by neighborhood
- 2. Affordability index- % of households that rent/own who pay more than 30% of their household income for rent and related costs/mortgage and related costs.
- 3. Abandoned buildings by neighborhood
- 4. Percentage of commercial properties that are vacant or abandoned

Available Data (Source):

Data collected (most recent):

# clients reported at local homeless shelters (CT Dept of Social Svcs)	Yearly (2004)
# children reported at local homeless shelters (CT Dept of Social Svcs)	Yearly (2004)
# shelter beds available (CT Dept of Social Svcs)	Yearly (2004)
# availability of bed nights in shelters (CT Dept of Social Svcs)	Yearly (2004)
# transitional housing units (CT Dept of Social Svcs)	Yearly (2004)
# availability of transitional housing unit nights (CT Dept of Social Svcs)	Yearly (2004)
# of units—owner vs. renter occupied (US Census Bureau)	Decennial (2000)
Median home sales price (UConn Center for Real Estate Data)	Yearly (2004)

SAFETY- Sample questions/indicators:

- 1. Do you feel safe walking in neighborhood during the day? At night?
- 2. Do you keep firearms in or around home?
- 3. Domestic Violence Incidents/attempts by neighborhood
- 4. Number of Fatal Motor Vehicle Accidents Number of Alcohol-Related Fatal Accidents
- 5. Confidence in police to prevent crime, % who think police are respectful by neighborhood
- 6. Number juvenile arrests for violent offenses per 1,000 youth ages 10-17 Number juvenile arrests for drug-related offenses per 1,000 youth ages 10-17 Percent of all juvenile arrests where juvenile has at least one prior offense

Available Data (Source):

Data collected (most recent):

Violent crime rate (per 100,000 people) (2004) (US Dept of Justice-Bureau of Justice Statistics)

Property crime- rate (US Dept of Justice-Bureau of Justice Statistics) (2004)

HEALTH- Sample questions/indicators:

- 1. % births delivered at term
- 2. % births where mother received early prenatal care (1st trimester)
- 3. % of population who exercised last month -type of exercise, times per week
- 4. Smoking and overweight rates in adults by race/ethnicity
- 5. % surveyed who said "yes" to having a personal/family/marriage problem -details of support (did they talk about the problem?, to whom?, did they get help needed?)
- 6. Mortality from heart disease by zip code
 Distribution of heart disease mortality rates by zip (map)

Available Data (Source):

Data collected (most recent):

Infant mortality rate (DataHaven)	(2003)
Birth rates (ages 15-17, 18 and 19) (DataHaven)	(2003)
Births to mothers seeking prenatal care in the first trimester (DataHaven)	(2003)
Births to mothers receiving inadequate prenatal care (DataHaven)	(2003)
Rate of infants with low birth weight (DataHaven)	(2003)
Rate of infants with very low birth weight (DataHaven)	(2003)
Heart disease mortality (CT Dept of Health)	(2002)
Cancer incidence rates (CT Dept of Health)	(1999)
Asthma hospitalization rates (CT Dept of Health)	(2005)
New AIDS cases reported yearly (CT Dept of Health)	(2006)
Total AIDS cases per capita (CT Dept of Health)	(2002)
Hepatitis B prevalence (CT Dept of Health)	(2003)

HEALTHCARE- Sample questions/indicators:

- 1. # of inpatient diagnosis related to diabetes complications
- 2. Pediatric asthma hospital discharge rates by zip code, by year
- 3. Do you have a source of health care? Do you have health coverage?
- 4. # of months since last BP/cholesterol check
- 5. In the past 12 months, where you unable to see a doctor for cost-related reasons?
- 6. Does your doctor show respect? Spend enough time with you? Listen carefully?
- 7. Do the hospital and community health centers have interpreter services?

Available Data (Source):

Data collected (most recent):

Children covered by Medicaid/private health insurance (DataHaven)	Yearly (2003)
Children under 19 on HUSKY A/B (DataHaven)	Yearly (2003)
HUSKY A/B utilization percentage (DataHaven)	Yearly (2003)

EDUCATION- Sample questions/indicators:

- 1. % population age 25-64 with high school diploma or equivalent % population age 25-64 with some college and above
- 2. Number of people on waiting list for public adult education and English as second language courses
- 3. Student to teacher ratio by grade level
- 4. Percentage of 3rd graders reading at grade level by race/ethnicity and income
- 5. Per student spending in education K-12 (state and city)
- 6. Attendance, dropout and expulsion rates by grade

Available Data (Source):

Data collected (most recent):

Children enrolled in early childhood programs (State Dept of Educ)	Decennial (2000)
Net current expenditure per student (State Dept of Educ)	Yearly (2004)
Student to teacher ratio (State Dept of Educ)	Yearly (2003)
Students eligible for free or reduced school lunch (State Dept of Educ)	Yearly (2004)
CAPT scores/CMT scores (8th grade math and 4th grade reading)	Yearly (2005)
(State Dept of Educ)	
Cumulative high school dropout rate (State Dept of Educ)	Yearly (2004)

POLITICAL/CIVIC ENGAGEMENT- Sample questions/indicators:

- 1. People living at same address by # of years and by neighborhood
- 2. Generosity in giving versus income (state)
- 3. Community newspapers by neighborhood and language
- 4. Library books in circulation by neighborhood
- 5. Small business loans by neighborhood, by gender, by race/ethnicity
- 6. Voter registration and participation rates
- 7. Trust in neighbors-"if you had a problem, could you rely on your nearby neighbors for help?"

Available Data (Source):

Data collected (most recent):

Registered Voters- Number (DataHaven)	Yearly (2005)
Voters in Municipal Elections- Number (DataHaven)	Every 2 years (2005)
Voters in Federal Elections- Number (DataHaven)	Every 4 years (2004)
Voters in Municipal Elections- Percentage (DataHaven)	Every 2 years (2005)
Hours Volunteered Last Month (Community Compass- UWGWN)	Once (Spring 2003)
Charitable Donations Last Year (Community Compass- UWGWN)	Once (Spring 2003)