Using Casita Maria's Map Tool

This paper presents examples of documenting, displaying, and discussing the social impact of Casita Maria through the use of geographic maps. Nine cultural arts organizations, all part of the Space for Change award program administered by Leveraging Investments in Creativity (LINC),[1] participated in this study by providing budgetary data, programming information, and data regarding visitors and programming clientele. We provide examples of how visitor and clientele address data can be mapped geographically and used in various settings from internal management discussions to part of grant applications.

The map tool created for Casita Maria was developed to assist the organization in documenting and articulating the location of members of the community who support it through membership, donations, and general interest, and to document the location of the students who participate in youth programming. The map tool can be found on Casita Maria's 'front page' of our web site at http://web.williams.edu/Economics/ArtsEcon/Casita.html. There you will find a Casita Maria map option with an overlay of Census variables for the Bronx (listed as the county overlay), and a map option with an overlay of Census variables for a five mile (local) radius around Casita Maria.[2] We offer the choice because one geographic region may be of more interest than the other in writing particular types of reports. Sometimes it would be more useful to show where in the Bronx one is reaching students; other times the attraction of students in the local area may be of greater interest. In this paper we will work with the Bronx (county) map, but everything presented here also applies to the 5 mile radius map.

We do not provide interpretations of the many interesting aspects of Casita Maria's online map here. Rather this paper provides examples of how to use the online, interactive map tool to explore questions about Casita Maria's neighborhood, programming, and support systems that might arise. This brief paper provides information on how to use the online mapping tool to:

- change the Census variables displayed on the map;
- change the address lists displayed on the map;
- add new address data to the map; and
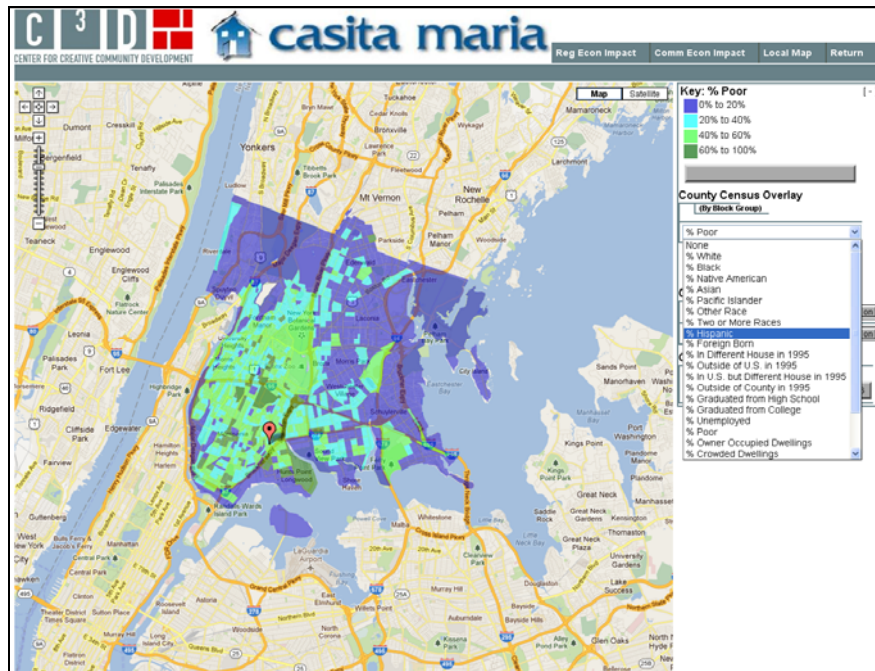- create a copy of the map to include in a report.

How to change the Census variables displayed on the map

Casita Maria's interactive map has 23 Census variables available for viewing. The default variable when the map opens is '% poor'. Clicking on the drop-down box in the right-hand window provides the list of Census variables, as shown in Figure 1.

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[1] For additional information on the Space for Change program see http://www.lincnet.net/artist-space/ford-foundation-planning-and-pre-development-grants, accessed 2/21/2012.
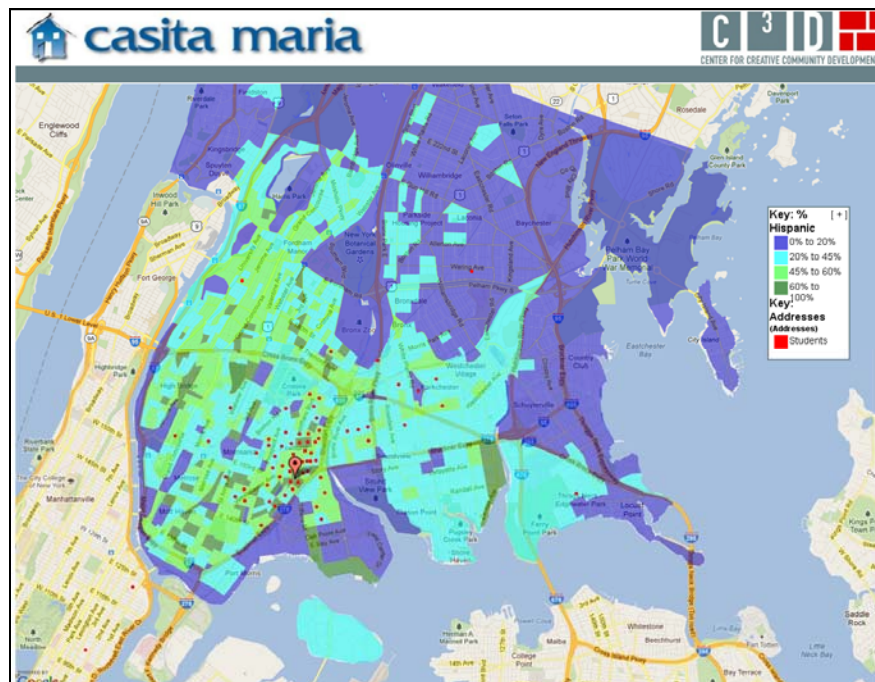
[2] The Census overlay does not make a perfect circle with 5 mile radius around Casita Maria. It shows all Census block groups with any part falling within a 5 mile radius; this explains the slightly more jagged display.

Figure 1: Change the Census Variables Displayed on the Map

On the interactive map, select '% Hispanic' from the list. Then turn on the 'Students' layer. Zooming in on the map to better differentiate block groups around Casita Maria produces the map in Figure 2. On one layer we see Census block groups in the Bronx shaded according to the percent Hispanic. On the other layer is displayed a red dot where at least one student from that Census block group attended Casita Maria youth programming.
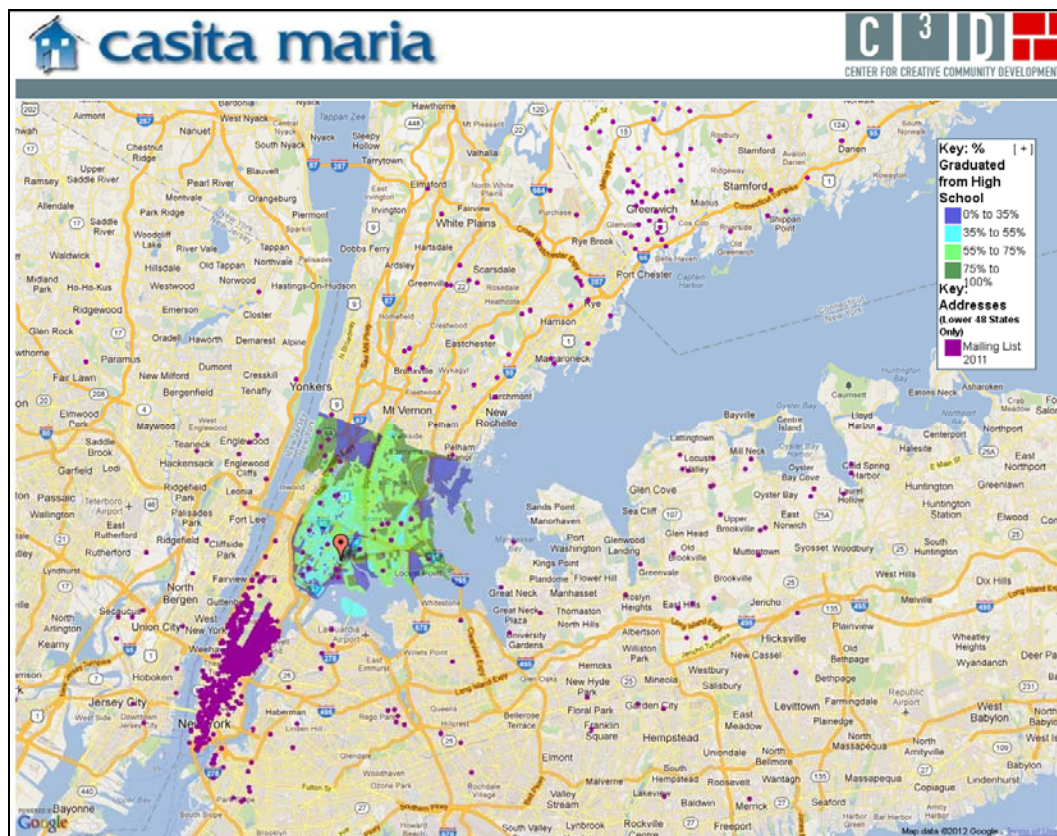
Figure 2: Casita Maria: Percent Hispanic and Origin of Students

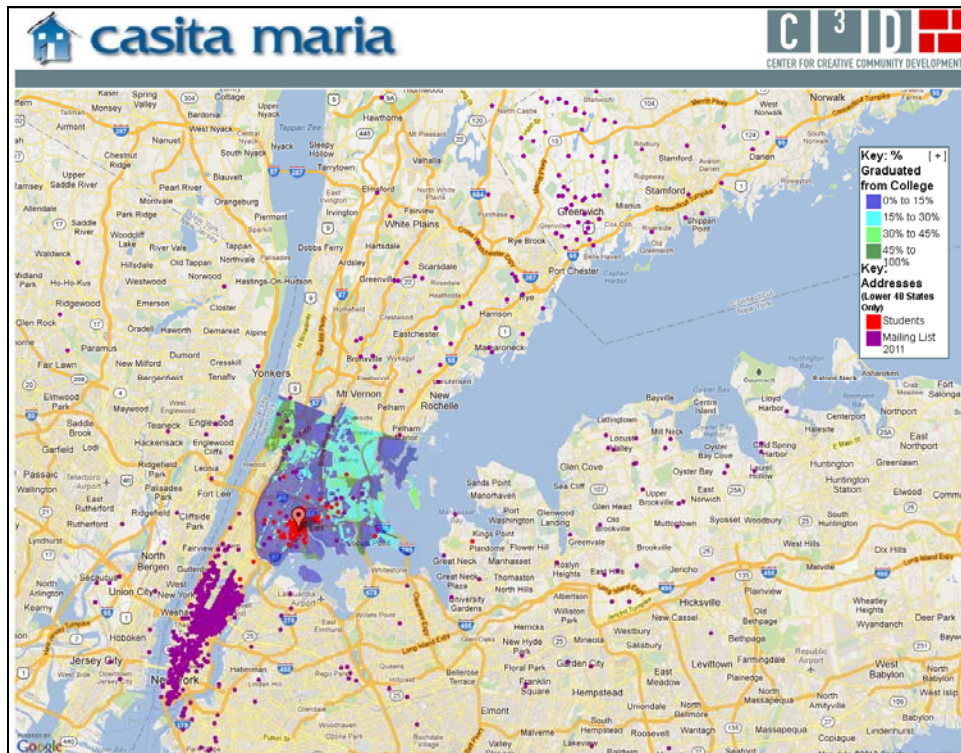How to change the address lists displayed on the map

Two lists of addresses are available for the Casita Maria map. One is a list of Census block groups from which students to Casita Maria's youth programming were drawn; the other is Casita Maria's mailing list. The opening default for the map is that neither address list is displayed. To choose an address list click the 'on' button next to the list name. The map of students, shown in Figure 2 above, would be useful in a report on youth programming. The mailing list map, shown in Figure 3 below, would be useful for a marketing director or development director.

Figure 3: Casita Maria Mailing List Map

Mapping students for improvement of youth programming and mapping the mailing list for marketing use are straightforward applications of Casita Maria's mapping tool. One of the strengths of an interactive online tool, however, is that it is possible to explore combinations of Census variables and address lists, and discover relationships that might otherwise be overlooked. If we turn 'on' both the student list and the general mailing list we are presented with a map with exactly this characteristic: it is a map that might never have been specifically requested of a consultant, yet it can play a useful role in demonstrating and articulating a part of Casita Maria's story. The map in Figure 4 shows Casita Maria's two audiences.

Figure 4: Casita Maria's Two Audiences

In conversation with staff at Casita Maria, one thing that came out was that they have two very different audiences, and that this is an important feature of their position in the community. The students are drawn very locally, from within just a few miles. Members, supporters, and audience members, as represented on the mailing list, are more regional, heavily concentrated in Manhattan, and very limited in the Bronx. Casita Maria would like to broaden student participation beyond the immediate neighborhood, and to increase audience attendance in the Bronx.

While this feature of Casita Maria's community context came up early in conversation, it was difficult to assess if Casita Maria's programming audience was as bifurcated as they thought, or if it was really that much different from similar cultural arts organizations working in challenged neighborhoods. Figure 4 immediately, empirically, and visually supports what staff were telling us verbally -- that Casita Maria is working with two very different audiences. Comparison with maps of other organizations included in the Space for Change project confirmed that this was not a shared feature of the Space for Change organizations but was indeed pronounced for Casita Maria.

The information presented in Figure 4 can be very important, even if it is never included by Casita Maria in a report or grant application. It is important because it supports the social context story that Casita Maria tells. It is important because a person unfamiliar with the organization or the community can look at the map and reach their own conclusions rather than being totally reliant on a statement made by the organization. And it is important because after looking at the map a person might conclude that Casita Maria understands their community context, their organizational challenges, and that an initiative to increase membership and audience attendance
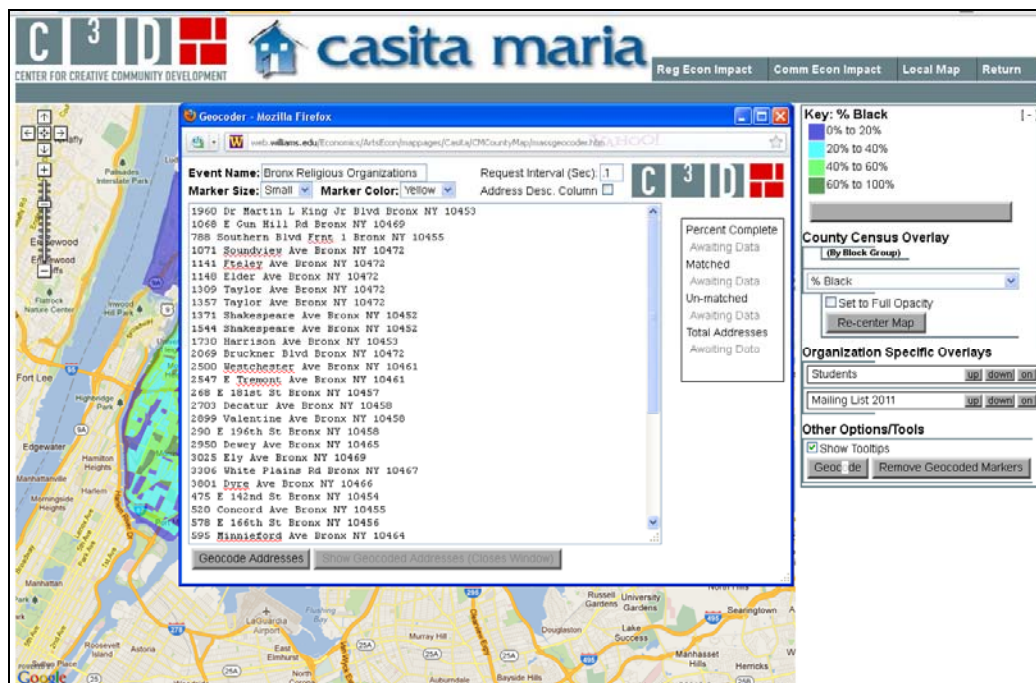
in the Bronx makes sense. The map in Figure 4 can transform a skeptic into a supporter not so much because it 'proves' need but because it demonstrates Casita Maria's understanding of the context within it works, and that Casita Maria ties future goals to existing realities.

How to add new address data to the map

In order to describe how to add new data to Casita Maria's map, we must work with a hypothetical situation. Let us say that Casita Maria decides to develop an initiative to expand attendance from the Bronx, especially the South Bronx. Perhaps they propose developing partnerships with religious organizations (typically broader than a church) in the area. As a first step they want to map the religious organizations in order to choose which to approach concerning partnering. It is possible to create such a map using the 'Geocode' button included on Casita Maria's map page.

Click on the 'Geocode' button and a new window opens. Addresses of area religious organizations can be copied and pasted into the Geocoder box from many sources such as an Excel spreadsheet or a Notepad text file. For the example below we pasted addresses of thirty-seven religious organizations in the Bronx.[3] The addresses do not need to be formatted in a special way, just one address per line. Within the Geocoder box, choose whether you want large markers or small for the addresses (we chose small) and the color of the markers (we chose yellow). Figure 5 shows what the computer screen for Casita Maria's interactive program looks like at this point.
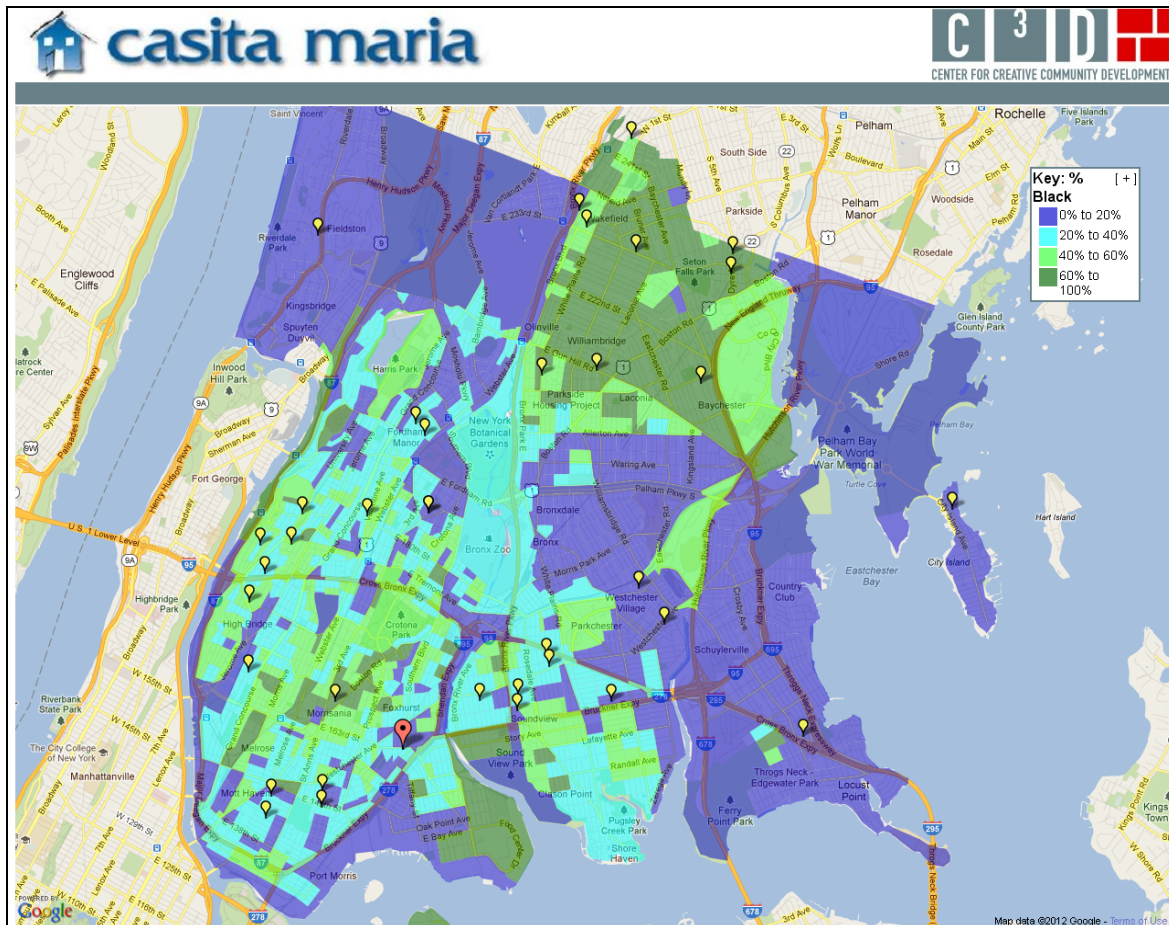
Figure 5: Adding Bronx Religious Organizations

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[3]We used addresses of religious organizations provided at http://www.yellowpages.com/bronx-ny/churches-places-of-worship?refinements%5Bheadingtext%5D=Religious+Organizations, accessed 2/13/2012. The list of addresses is provided in Appendix A so that you can practice with the Geocoder.

Click the 'Show Geocoded Addresses' button. The Geocoder box closes and the new addresses are visible on the map. The new addresses can be shown by themselves or with the other address lists. Figure 6 shows the addresses of the area religious organizations mapped with '% Black' Census data.

Figure 6: Religious Organizations in the Bronx

Unlike address maps created by us for Casita Maria, these address markers will not save permanently once you close the map. You will want to save a copy of the addresses as an Excel spreadsheet or other file, so that you may use them again in the Geocoder. You will also want to capture images of the map once it is made, so that you have copies for inclusion in reports. We discuss next how to do this.

How to prepare a map for inclusion in a report

Lastly, we describe how to take a map created with the map tool and prepare it for inclusion in a report[4]. We will discuss the map of religious organizations in the Bronx above. We have already provided the step by step instructions for creating the map.

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[4] These instructions are for a PC.

Once the map is created, you will see a minus sign in brackets [-] in the corner of the right hand window of the computer screen. Click on this [-]. The window collapses such that the map key is now inside the map itself. It is possible to position both the map and the key for the best display. The F11 function key will expand the map so that it fills the screen, hiding your Internet toolbars.

On your keyboard press the Control key (Ctrl) and Print Screen key (Prt Scr) simultaneously. This command will capture a copy of your screen as you see it. Now press F11 again to have access to your toolbar and Word document. Paste the image you copied into the document. You can adjust the size of the map by grabbing a corner of the image with your mouse and pulling or pushing diagonally on the corner.

Finally, right click on the map and choose 'Borders and Shading'. Choose 'Box' and the program will draw a box border around the figure in your Word document. This is how Figure 6 above was formatted.[5] When you have completed these steps, return to the online interactive map. Click on the [+] in the key. The screen will return to its default state and you will have all the options of the navigation buttons at the top.

Summary

The information and examples provided here demonstrate how to use the interactive map tool created for Casita Maria. The goal of the mapping tool is to allow Casita Maria to easily and effectively make the case for the impact it has on the Bronx. The tool is free, publicly available, and interactive.

With the discussion here to guide you, you can go to Casita Maria's interactive map tool on our web site at http://web.williams.edu/Economics/ArtsEcon/Casita.html and explore variables and relationships among Census data, youth programming, and broader support. You can create dozens of maps and prepare relevant ones for inclusion in reports. The interactive map tool will be available to Casita Maria into the future, and it will be possible for addresses related to new initiatives to be mapped.

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[5] There are differences not only between PC programs and programs for Mac, but also differences in different versions of Word and differences that may occur depending on the Internet browser you use. The instructions here are meant to give you a general idea of how to format the completed map. You may have to do an Internet search for equivalent actions depending on your configuration of programs on your machine.

Appendix A
Addresses of Religious Organizations in the Bronx

1960 Dr Martin L King Jr Blvd Bronx NY
10453
1068 E Gun Hill Rd Bronx NY 10469
788 Southern Blvd Frnt 1 Bronx NY 10455
1071 Soundview Ave Bronx NY 10472
1141 Fteley Ave Bronx NY 10472
1148 Elder Ave Bronx NY 10472
1309 Taylor Ave Bronx NY 10472
1357 Taylor Ave Bronx NY 10472
1371 Shakespeare Ave Bronx NY 10452
1544 Shakespeare Ave Bronx NY 10452
1730 Harrison Ave Bronx NY 10453
2069 Bruckner Blvd Bronx NY 10472
2500 Westchester Ave Bronx NY 10461
2547 E Tremont Ave Bronx NY 10461
268 E 181st St Bronx NY 10457
2703 Decatur Ave Bronx NY 10458
2899 Valentine Ave Bronx NY 10458
290 E 196th St Bronx NY 10458
2950 Dewey Ave Bronx NY 10465
3025 Ely Ave Bronx NY 10469
3306 White Plains Rd Bronx NY 10467
3801 Dyre Ave Bronx NY 10466
475 E 142nd St Bronx NY 10454
520 Concord Ave Bronx NY 10455
578 E 166th St Bronx NY 10456
595 Minnieford Ave Bronx NY 10464
658 E 234th St Bronx NY 10466
822 E 233rd St Bronx NY 10466
85 E 165th St Bronx NY 10452
963 E 233rd St Bronx NY 10466
1475 Ave # 5B Bronx NY 10452
412 147th St Bronx NY 10455
660 243rd St Bronx NY 10470
535 246th St Bronx NY 10471
4300 Ave Bronx NY 10466
2509 Ave Bronx NY 10469
6301 Ave Bronx NY 10471