Magnet schools in Hartford: The intersection of race and school choice among applicants.

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Trinity College
Which magnet schools count toward the Sheff goal?

At present, 22 interdistrict magnet schools have been opened, offering a wide range of curricular specializations designed to attract students from both city and suburban districts. Most are managed by the Capitol Region Educational Council (CREC) or the Hartford Public Schools (HPS), with two others managed by suburban districts.

But not all magnet schools count toward the Sheff 30% goal. According to the 2003 settlement, a magnet qualifies if its proportion of minority students does not exceed an annual limit, calculated as the percentage of minority students in the entire 22-district Sheff region (currently 44%) plus 30 percentage points, for a total minority student limit of 74% in 2006-07. However, the settlement exempts schools from this limit during their first 3 years of operation. The state legislature approved the Sheff legal settlement in February 2003.

Still, while a magnet school may fail to meet the 2003 Sheff standard, it may continue to receive state funding. In May 2002, the state legislature amended CT Statute 10-264L, which currently holds that magnet schools established prior to July 2003 are not limited to the proportion of minority students they enroll (but those created after July 2003 must enroll between 25 to 75 percent minority). The existence of different state-approved racial standards for magnet schools has led to considerable confusion on this important policy issue.

Map 3: Interdistrict Magnets in Hartford region, by Race, 2006-07

Percent Minority Students
- 0 - 25%
- 26 - 50%
- 50 - 75%
- 75 - 100%

1 Mile
What questions can be asked with these types of data?
Research Questions

1. Is there a strong relationship between the rate of magnet applications and school CMT scores in Hartford?
2. Do applications to HPS elementary magnets vary across different Hartford neighborhoods?
3. Are magnet applications statistically representative of the racial demographics of neighborhoods in which they reside?
4. Do magnet schools vary in their degree of magnetism?
How can these types of questions be answered?
How can these types of questions be answered?

Researchers use Geographic Information System software (like ArcGIS) to conduct spatial analysis of demographic patterns in magnet school applications or enrollments.
Previous work using GIS

- Private, charter, and magnet schools help perpetuate racial isolation. (Saporito, 2006)
- Black and Hispanic applicants are more or less likely to apply depending upon where they live in Hartford (Estevez, 2006)
How does the current study differ?

• Neighborhood level study
• Focuses on Black-Hispanic relationship
• Analysis of six HPS elementary magnets
APPLICATION FOR SEPTEMBER 2007
HARTFORD HOST INTERDISTRICT MAGNET SCHOOLS

1. It is expected that parents and students understand and intend to comply with the academic, program and uniform requirements of each Magnet School selected on this application.

2. Only one application per student.

3. Application will not be processed unless all requested information is provided.

4. Indicate your school selection or selections for Hartford Host Magnet Schools only.

5. The form must be signed by a parent or legal guardian.

6. Please notify the Magnet School Office of any address or telephone changes.

7. RETURN APPLICATION TO THE MAGNET SCHOOLS OFFICE BY: FRIDAY, FEBRUARY 16, 2007, 3:30 pm

Hartford Public Schools  Tel: 860-695-8839
Magnet School Office  Fax: 860-722-8514
960 Main Street – 5th Floor  Hours: 8:30 a.m. – 3:30 p.m.
Hartford, Connecticut 06103  www.hartfordschools.org

HARTFORD RESIDENTS ONLY
Are you selecting a Magnet School(s) as a No Child Left Behind request?
☐ YES  ☐ NO

Please PRINT the following information:

<table>
<thead>
<tr>
<th>LAST NAME</th>
<th>FIRST NAME</th>
<th>MU.</th>
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2. Address:

3. Student's Date of Birth: ________ Gender (check one): ☐ Female ☐ Male

4. Race (Please check only one): ☐ American Indian ☐ Asian ☐ Black ☐ Hispanic ☐ Caucasian
   We are required by law to report racial information about our applicant and enrollment pools.

5. Print Parent/Legal Guardian Name: ___________________________ Home Phone: ________

6. Parent/Legal Guardian Work Phone: __________________________ Cell: ________

7. Student's current school: __________________________ City: ________

8. Grade applying to for NEXT school year (September, 2007): ________

9. School Selections: Please indicate school name in order of preference:

   1st Selection (school name): __________________________
   2nd Selection (school name): __________________________

10. List any brothers or sisters, living with applicant, attending one of the Magnet Schools selected above:

   NAME OF CHILD  PRESENT MAGNET SCHOOL  GRADE
   __________________________  __________________________  __________________________
   __________________________  __________________________  __________________________
   __________________________  __________________________  __________________________

11. How did you hear about Magnet Schools? (Check all that apply):

   ☐ TV ☐ Newspaper ☐ Website ☐ School ☐ Friends/Family ☐ Mailer ☐ Other

   X SIGNATURE OF PARENT OR LEGAL GUARDIAN (REQUIRED FOR APPLICATION TO BE VALID)

   DATE

I am applying for placement of my child at the Magnet School(s) indicated on this form. I understand that the information provided by me on this application will be checked for accuracy, and that false information will disqualify the applicant.

KEEP YELLOW COPY FOR YOUR RECORDS
9. School Selections: Please indicate school name in order of preference:

1st Selection (school name):

2nd Selection (school name):

11. How did you hear about Magnet Schools? (Check all that apply):
   - TV
   - Newspaper
   - Website
   - School
   - Friends/Family
   - Mailer
   - Other

   SIGNATURE OF PARENT OR LEGAL GUARDIAN (REQUIRED FOR APPLICATION TO BE VALID)
Remove duplicate applications from excel file

9. School Selections: Please indicate school name in order of preference:

1st Selection (school name):

2nd Selection (school name):
Methods: GIS geocoding at the neighborhood-level

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Link data to street map

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Geocode street address data as individual points on map.
Methods: GIS geocoding at the neighborhood-level

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Overlay neighborhood boundary lines (census tracts, elementary school zones, etc)
Methods: GIS geocoding at the neighborhood-level

Use colors to represent data groups

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Methods: GIS geocoding at the neighborhood-level

Remove dots and address data to maintain individual family confidentiality
RESULTS
Is there a strong relationship between the rate of magnet applications and school CMT scores in Hartford?

Relation of Magnet Applications and CMT Scores

![Graph showing the relationship between magnet applications and CMT scores. The R² value is 0.1894.](image)

- Applications per School Zone Enrollment
- Average Percentage of 4th Graders Scoring at Goal Level on CMTs
Do applications to HPS elementary magnets vary across different Hartford neighborhoods?

Example:
Twain Elem school zone
62 applicants / 290 enrolled = 21% applied to opt out
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Do magnet schools vary in their degree of magnetism?

Compare:

Although Annie Fisher and Simpson-Waverly magnets located near one another, Annie Fisher “attracted” Hartford applicants from an average distance of 1.8 miles, compared to 1.1 miles.

NOTE: Map only demonstrates straight-line distance.
Recap

1. School quality has very little relation with school choice rates
2. Application rates do vary depending upon where an applicant resides in Hartford
3. Families are not applying to HPS elementary magnets equally
4. The six HPS elementary magnets have varying degrees of magnetism
So what?

- *Sheff v. O’Neill* is back in the news again
  - Are magnet schools doing the job they were intended to?
  - Should we take a new approach toward improving desegregation efforts?
References
