IFF School Studies Methodology

IFF school studies are supply and demand needs assessments. Supply is the number of seats based in performing schools. Demand is the number of children living in a neighborhood. The difference between supply (performing seats) and demand (students) is the service gap, which is calculated for each neighborhood and for each grade division (i.e. K-5, 6-8, 9-12).

Based on the service gap, neighborhoods are ranked for each respective grade division. The average rank across the grade divisions produces the final rank. The priority areas are the neighborhoods with the highest average rank across grade divisions. In essence, the study identifies the top neighborhoods (priority areas) in which the children have the greatest need for better access to performing schools.

Supply is the number of seats (capacity) in performing schools, distributed across neighborhoods based on the catchment area of each school.

The seats of performing schools are distributed across each neighborhood based on the overlap between the neighborhood and the catchment area of the school. For neighborhood schools with boundaries, performing capacity is proportioned across the neighborhoods that intersect with the school's attendance boundary. For citywide magnet and selective schools, performing capacity is proportioned across the district. For schools without attendance boundaries (i.e. charter and private schools), performing capacity is proportioned across neighborhoods based on the average distance children commute to school. When student-level data is available, these distances are measured through a precise commute analysis (see section below). Otherwise, national averages are used.

Depending on data availability, several methods can be used to calculate the capacity of a school. The preferred method is program capacity (the number of children a school can serve based on academic programming). This tends to provide the most accurate picture of how many students a school can accommodate. When program capacity is not available, IFF uses building capacity (the number of students a school can serve based on physical layout and design). When using building capacity, eighty percent utilization is considered full capacity. If neither program nor building capacity is available, capacity is estimated using five years of audited enrollment. For district schools, average enrollment over the previous five years proxies as program capacity. This approach assumes that district schools tend to have relatively steady enrollment, which is at or near capacity, but recognizes that many urban district schools operate over capacity. For charter and private schools, maximum enrollment over the past five years proxies as capacity. By estimating capacity with the highest enrollment point, this method captures the expansion or contraction of charters and independent schools, as well as steady state. Capacity is proportioned across the grades a school serves and allocated to the corresponding grade division in the analysis.

IFF generally uses state accountability systems to identify school performance—especially when the state has received a No Child Left Behind (NCLB) waiver from the United States

Department of Education. With this waiver, a state has developed and implemented a system that uses multiple key indices to determine school quality.

Demand is the number of children based on where they live. Student-level data is used to map where students live. Following strict privacy protocol, this methodology ensures that we capture the need for performing seats specific to a neighborhood while maintaining student anonymity. When student-level data is not available, demand is calculated with an algorithm that proportions students to neighborhoods using audited enrollment and density of school-age children. Student-level data is the preferred method.

Commute Analysis (only available as an add-on to comprehensive studies). To understand student commute patterns, IFF maps student-level data to analyze where students live compared to where they attend school. For example, to understand what populations are served by performing schools, IFF aggregates the neighborhoods represented in the student body of these schools. Conversely, to understand the quality of schools that students access based on where they live, IFF aggregates the quality of schools attended by children in each neighborhood. Finally, IFF aggregates the students from each priority neighborhood in each school to show where each child travels to attend school—by type of school and performance of school. Depending on local need and priorities, other methodologies can be developed to provide insight into the dynamics of public policy, consumer knowledge and parent choice and their effect on educational opportunity.

Schools Included in the Studies. Schools with a general education program that report performance and enrollment data to the state are included in the study. Schools that do not report data because the student population is not tested, i.e. early childhood education or because policy does not require reporting, i.e. private schools, cannot be included in the analysis. Similarly, new schools with insufficient data to determine a state assigned accountability rating cannot be included.

Data Sources. The primary data sources for IFF school studies are the National Center for Education Statistics (NCES) and state boards of education. From these sources, IFF gathers school directory information, audited enrollment and performance data. School building data and student-level data must come from the district or schools. Data for geographic and demographic analysis come from ESRI, the US Census Bureau, and school districts.