V. IDENTIFYING AREAS OF POTENTIAL NEED FOR SRTS IMPROVEMENTS

NCTCOG developed a high-level GIS analysis to help to prioritize the allocation of resources, with the goal of improving the ability of students across the region to safely walk and bicycle to school. The intent is that the analysis results would be supplemented with local site analysis and on-the-ground observation as part of regional planning processes.

Two regional analyses were completed:

- 1. The *transportation safety analysis* quantitatively combined and weighed roadway characteristics and safety data to highlight areas of high concern and potential need for SRTS interventions. The result is a score for each school included in the analysis that indicates the potential need for SRTS interventions.
- 2. The *environmental justice analysis* is a secondary analysis conducted to highlight areas that may need greater consideration due to environmental justice factors.

The results of these analyses are intended for NCTCOG, planners, and ISDs in the region to use along with their professional judgment when considering the best distribution of funding and other resources. Schools identified in this analysis were limited to the data available at the time of analysis. This limitation does not define the scope of schools eligible for participation in either through NCTCOG's or TxDOT's Transportation Alternatives SRTS program.

All schools included in these analyses were public K-12 schools, including charter schools, located in the 12-county MPA (see Figure 8, page II-2).

Transportation Safety GIS Analysis

Data Used

Data included in the analysis is summarized in Figure 25. These data sets were chosen because literature suggested that they can inform the degree to which the built environment is safe for pedestrians and bicyclists.

Figure 25: Transportation Safety GIS Analysis Data

Data Name	Year(s) of Data	Source	Notes	Score Impact
Public Schools	2021	NCTCOG & Texas Education Agency	Location of public K-12 schools geocoded from coordinates provided.	Locations used for score.
Observed Speeds (actual speeds at which drivers are travelling) – cell phone data	2021	INRIX, NCTCOG	Observed average hourly vehicle speed per collector and arterial roadway segments using cell phone location technology. Two-mile radius of each school site, between 6 am and 9 am, 2 pm and 5 pm for date during school year and date during summer.	Higher speeds indicate a less safe roadway environment for nonmotorized vehicle users.
Posted Speeds (speeds as displayed on speed limit signs)	TxDOT 2023 NCTCOG 2021	TxDOT roadway inventory NCTCOG travel demand model	TxDOT roadway inventory posted speeds used where observed speeds unavailable. NCTCOG travel demand model posted speeds used where INRIX observed speeds and TxDOT roadway inventory posted speed unavailable.	Higher speeds indicate a less safe roadway environment for nonmotorized vehicle users.
Auto-Only Crashes	2016-2021	NCTCOG, TxDOT Crash Records Information System (CRIS)	Vehicle crashes reported to TxDOT by location. Crashes from limited access roadways (IH 35, Dallas North Tollway, etc.) excluded.	Higher crash rates indicate a less safe roadway for non-motorized vehicle users.
Cyclist or Pedestrian- Involved Crashes	2016-2021	NCTCOG, TxDOT CRIS	Crashes from limited access roadways excluded.	Higher crash rates indicate a less safe roadway environment for non-motorized vehicle users.

Methods

The GIS analysis was completed using ArcGIS Pro's Model Builder function. The analysis combined the various data sets within two miles of each school to identify the schools that had the most crashes and highest speeds within a two-mile radius of their campus. Each data set's totals were normalized so that their sums fell between 0 and 100 so scores could be effectively compared and a final score calculated. The model then calculated the final score for each school based on the normalized data and weights as illustrated in Figure 26.

Figure 26: Percentage Weight of Data in Final Calculation

Data Name	Data Weight
"Impact Speed and a Pedestrian's Risk of Severe Injury or Death" Study ¹¹ using the average of INRIX Speed Data school year morning and afternoon windows to approximate risk of severe injury or death	40% (20% for Risk of Severe Injury and 20% for Risk of Fatality)
Averaged speed within one mile of schools (observed speed used where available; posted speeds elsewhere)	20%
Cyclist or Pedestrian-Involved Crash Data (2016-2021) within a two-mile radius of the school	20%
Auto-Only Crash Data (2016-2021) within a two-mile radius of the school	20%

Scoring

Cyclist and Pedestrian-involved Crashes

The analysis allocated the most weight to the frequency of cyclist and pedestrian-involved crashes since these types of road users reflect students and their families that engage in SRTS activities. By placing the highest weight on this data category, the model better identified school areas that would most benefit from SRTS infrastructure or other interventions.

Auto-only Involved Crashes

Auto-only involved crashes were scored at the same weight as cyclist or pedestrian-involved crash counterparts because: 1) cyclist or pedestrian-involved crashes are historically underreported; and 2) any form of crash indicates that there is potentially an issue with roadway/intersection layout or design, driver awareness, or another possible factor which could ultimately result in a pedestrian or bicyclist-involved incident. Crashes occurring on limited-access, high-speed freeways where schools are not generally located were excluded. Crashes on state and U.S. highways that are not limited access were included.

Vehicle Speeds

The analysis also considered the average vehicle speed of travel from INRIX speed data, which is a combination of cell phone data and modeling, for all roads within a two-mile radius of the school site. The speed data was used to approximate the potential of severe injury and fatality in a collision with a pedestrian separately since the two categories did not always overlap in their "grading." For example, a vehicle traveling at 40 miles per hour striking a pedestrian would result in a 50 percent chance of fatality but a 75 percent chance of severe injury. These two percentages were scored differently in the final calculation and thus must be accounted for individually. This representation better contextualizes the threat vehicle speeds pose to pedestrians and other vulnerable road users, including students and their families walking or bicycling to school.



Figure 9 in Section II shows the complete breakout from American Automobile Association's "Impact Speed and a Pedestrian's Risk of Severe Injury or Death" study. Though INRIX's cell phone speed data is a more accessible tool to understand vehicle speed, it is a data set with limitations when considering lower volume roads on which some schools may be sited.

In approximately 16 percent of all locations, INRIX speed data was unavailable. In those cases, posted speed limits were used as a proxy of actual speeds. The speed values for these areas are considered conservative because actual speeds are generally higher than posted speeds.

Final Scores

Final scores fall between 0 and 100, with higher scores indicating a school area having more data points that indicate a potential area of concern. The higher a score returned for a school area, the more likely it is that a school could benefit from additional local analysis of the specific need for traffic safety interventions to improve the ability of students to safely walk and bicycle to school.

Results

A distribution graph of scores for all 2,082 schools that had the selected data at the time of the analysis is shown in Figure 27. The highest recorded score across all schools was 59.0 for Pegasus Charter High School in Dallas. The lowest recorded score across all schools was 5.7 for Nola Kathryn Wilson Elementary School in Crandall, Kaufman County (population 145,310 in 2020). Eighty-six percent (or 1,460) schools scored between 16 and 40. Only nine percent (or 168) schools scored above 40. A breakout summary for each county in both chart and map form is available in Appendix 5.

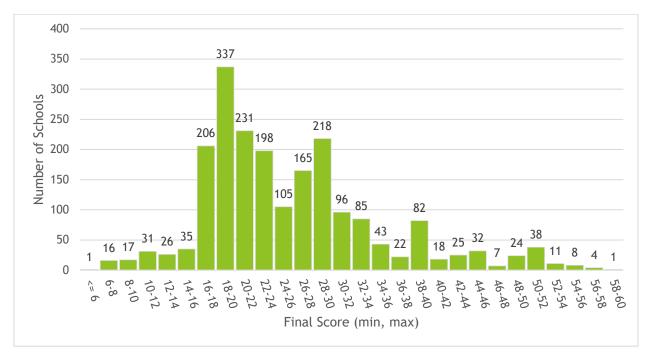


Figure 27: Distribution of Transportation Safety Analysis by School for MPA

The schools with the 20 highest scores across the MPA are shown in Figure 28. Half of those schools fall within the region's two largest cities, Dallas (seven) and Fort Worth (three). In addition, for Dallas and Fort Worth combined, five schools with scores in the top 20 are charter schools.

Given that urban areas and rural areas have different contexts and challenges related to Safe Routes to School, the top 20 results were also broken out into the five counties of the MPA that are primarily characterized by urban development (Collin, Dallas, Denton, Rockwall, and Tarrant) (Figure 29), and the seven predominantly rural counties (Ellis, Hood, Hunt, Johnson, Kaufman, Parker, and Wise) (Figure 30). The map shown in Figure 31 illustrates the distribution of all of the scores and highlights the top 20 regionwide.

For the five urban counties alone, eight of the top 20 schools are in Dallas, while four are in Fort Worth. Also, half of the top 20 schools are charter schools. By contrast, for the seven rural counties alone, the top 20 scores occur across a much larger diversity of cities; in addition, only four in the top 20 are charter schools and none of those are in the top 10. There are also two magnet schools, which can function similarly to charter schools.

For the rural counties, fewer schools (five or fewer for most counties) had scores over 50. Eleven percent (or 207) of schools scored between 16 and 40, compared to 86 percent of schools in the urban counties. Only three percent (or 57) of schools in rural counties scored above 40, compared to nine percent of schools in the urban counties.

There are areas of concern in each county when examined on a county-by-county basis and comparing relative scores in these more similar areas. County-level maps and tables are available in Appendix 5.

Figure 28: Top 20 Scoring Schools in the MPA

School Name	Туре	City	County	Final Scores
Pegasus Charter High School	Charter	Dallas	Dallas	59.0
Uplift Luna Preparatory High School/ Middle School	Charter	Dallas	Dallas	57.2
Uplift Ascend	Charter	Fort Worth	Tarrant	56.5
Life School Mountain Creek	Charter	Dallas	Dallas	56.5
Kemp Intermediate School	Traditional	Kemp	Kaufman	56.1
La Academia De Estrellas	Charter	Dallas	Dallas	55.7
Newman International Academy	Charter	Fort Worth	Tarrant	55.3
Ray Braswell High School	Traditional	Aubrey	Denton	55.0
Paloma Creek Elementary School	Traditional	Aubrey	Denton	54.9
Quest Campus (K – 8)	Charter	Dallas	Dallas	54.7
Miller Elementary School	Traditional	Little Elm	Denton	54.6
Harmony School of Innovation/ Science Academy	Charter	Carrollton	Denton	54.4
Joe K Bryant Elementary School	Traditional	Anna	Collin	54.3
Texans CAN Academy (Grant East)	Charter	Dallas	Dallas	53.5
J. Lyndal Hughes Elementary School	Traditional	Fort Worth	Tarrant	53.3
Anna High School	Traditional	Anna	Collin	53.2
Leta Horn Smith Elementary School	Traditional	Princeton	Collin	53.2
Citylab High School	Charter	Dallas	Dallas	53.1
Margaret Taylor Smith Elementary School	Traditional	Forney	Kaufman	52.8
Martin Elementary School	Traditional	Weatherford	Parker	52.8

Figure 29: Top 20 Scoring Schools in the MPA Core Urban Counties

School Name	Туре	City	County	Final Scores
Pegasus Charter High School	Charter	Dallas	Dallas	59.2
Uplift Luna Preparatory High School/ Middle School	Charter	Dallas	Dallas	57.2
Uplift Ascend	Charter	Fort Worth	Tarrant	56.5
Life School Mountain Creek	Charter	Dallas	Dallas	56.5
La Academia De Estrellas	Charter	Dallas	Dallas	55.7
Newman International Academy	Charter	Fort Worth	Tarrant	55.3
Ray Braswell High School	Traditional	Aubrey	Denton	55.0
Paloma Creek Elementary School	Traditional	Aubrey	Denton	54.9
Quest Campus (K – 8)	Charter	Dallas	Dallas	54.7
Miller Elementary School	Traditional	Little Elm	Denton	54.6
Harmony School of Innovation/ Science Academy	Charter	Carrollton	Denton	54.4
Joe K. Bryant Elementary School	Traditional	Anna	Collin	54.3
Texans CAN Academy (Grant East)	Charter	Dallas	Dallas	53.5
J. Lyndal Hughes Elementary School	Traditional	Fort Worth	Tarrant	53.3
Anna High School	Traditional	Anna	Collin	53.2
Leta Horn Smith Elementary School	Traditional	Princeton	Collin	53.2
Citylab High School	Charter	Dallas	Dallas	53.1
Harmony School of Excellence	Charter	Dallas	Dallas	52.5
Marine Creek Elementary School	Traditional	Fort Worth	Tarrant	52.5
Frank McMillan Junior High School	Traditional	Wylie	Collin	51.8

Figure 30: Top 20 Scoring Schools in the Rural Counties of the MPA

School Name	Туре	City	County	Final Scores
Kemp Intermediate School	Traditional	Kemp	Kaufman	56.1
Margaret Taylor Smith Elementary School	Traditional	Forney	Kaufman	52.8
Martin Elementary School	Traditional	Weatherford	Parker	52.8
North Forney High School	Traditional	Forney	Kaufman	52.8
Campbell High School	Traditional	Campbell	Hunt	52.5
Campbell Elementary School	Magnet	Campbell	Hunt	52.5
Alter Learning Center	Traditional	Keene	Johnson	51.9
Acton Middle School	Traditional	Granbury	Hood	51.6
Kauffman Leadership Academy	Traditional	Cleburne	Johnson	51.6
Greenville High School	Traditional	Greenville	Hunt	51.5
Oliver E Clift Elementary School	Traditional	Waxahachie	Ellis	51.1
Young Elementary School	Charter	Decatur	Wise	51.1
Faith Family Master Academy	Traditional	De Soto	Ellis	51.0
Nettie Baccus Elementary School	Traditional	Granbury	Hood	51.0
Hollis T. Dietz Elementary School	Traditional	Heartland	Kaufman	50.9
Scurry – Rosser Middle School	Magnet	Scurry	Kaufman	50.9
Katherine G. Johnson STEM Academy	Charter	Greenville	Hunt	50.7
Pioneer Technology (PTAA)	Charter	Greenville	Hunt	50.7
Life High School	Traditional	Waxahachie	Ellis	50.6
Reno Elementary School	Charter	Azle	Parker	50.6

Final Score: Traffic Needs Assessment Kaufman Top 20 Scores (52.78 - 59.01) 42.78 - 59.01 33.05 - 42.77 52.77 - 33.04 20.49 - 25.76 14.45 - 20.48 Highways
—— Interstate
—— State Highway
—— Tollway Johnson 9.

Figure 31: 12-County MPA with Top 20 Breakout

Hood

Discussion

As discussed in the Results, more than half the scores across the 12-county MPA and in the urban counties breakout are for schools in Dallas or Fort Worth. Given that Dallas and Fort Worth are the two largest cities in the region and thus have the most schools, as well as the most traffic, their frequency in the top 20 is not surprising.



The top 20 scores across the 12-county MPA and the five urban counties alone are also dominated by charter schools (mostly falling in Dallas or Fort Worth). Charter schools tend to occur in older urban areas where traditional schools may have been struggling. Since charter schools can draw students from anywhere without being limited to an attendance boundary, they may or may not have a large population of

students who live near the school. This has implications for whether Safe Routes to School interventions make sense for charter schools.

A desktop analysis of the charter schools in the top 20 determined that the built environment context of most of these schools appears very similar to non-charter schools. In other words, they are medium-to-large brick-and-mortar schools in or near residential neighborhoods that have at least the potential for students to walk or bicycle to school. While charter schools may draw their student body from much farther distances than traditional schools, it is reasonable to conclude that a portion of the student body of these schools could come from the nearby neighborhoods. Therefore, there is still the potential for these charter schools to benefit from Safe Routes to School interventions in a similar fashion to non-charter schools. Further review of specific charter school sites will provide

a clearer picture of the degree of benefit that could result from Safe Routes to School interventions at charter schools.

Schools in urban areas have very different contexts and needs from schools in rural areas related to pedestrian and bicycle safety. Highlighting the differences in scores between the urban and rural counties will help to direct resources to the areas of highest potential need in both rural and urban settings.



Traffic Safety Analysis Considerations

The traffic safety analysis provides a point of reference for consideration of how and where to allocate limited resources for Safe Routes to School planning, funding, and other activities. Like any analysis, there are some potential limitations to keep in mind when considering the results.

Next Steps

- 1. NCTCOG expects to continue to use and refine this GIS model to include the areas around new schools in the future, and to incorporate new data acquired by NCTCOG and/or different approaches to the analysis.
- 2. Staff anticipate performing more localized analyses for cities and ISDs as technical assistance to identify city-wide SRTS priorities or to support developing new SRTS plans.
- 3. NCTCOG will continue investigations into the role of charter schools in the region and implications for Safe Routes to School and school siting.

Environmental Justice Analysis

A separate Environmental Justice (EJ) analysis was completed for each of the block groups that contain school sites scored in the Transportation Safety GIS analysis. The Environmental Justice analysis considered multiple factors that are included in the NCTCOG Environmental Justice Index (EJI), as well as Texas Education Agency's ISD-level information about the percent of students who are eligible for free or reduced-cost lunch. The EJI, which is maintained by the NCTCOG Transportation Department, accounts for the entire 12-county MPA.

Data Used

The data used for the EJ analysis is summarized in Figure 32. Most of these data sets are from the NCTCOG EJI and were chosen because of their proximity to factors that may indicate a greater need for active transportation. More discussion about these data choices is included in the Methods section.

Figure 32: Environmental Justice Analysis Data

Data Name	Year(s) of Data	Source	Notes	Score Impact
School area scores resulting from Transportation Safety Analysis	2021 (Schools), 2023 (Analysis)	NCTCOG & Texas Education Agency	See Section V Identifying Areas of Potential Need for SRTS Improvements for more information about methods and scoring.	Locations used for score.
TEA Free/Reduced Lunch ²⁶ by ISD	2022-2023 School Year	TEA	Eligibility is based on federal poverty guidelines. Data shows the number of students in ISDs that are eligible for the program and the total number of students in the ISD.	Higher percentages of students eligible for the program indicate an area with higher poverty statistics in the school population.
NCTCOG EJI: Total Minority Population by Census Block Group	2021	NCTCOG	Describes the number of total minority persons in the block group.	Higher ratios of minority population vs the regional average scored higher in the analysis.
NCTCOG EJI: Low-Income Populations by Census Block Group	2021	NCTCOG	Poverty threshold used from American Community Survey (ACS) with an income threshold of 125% of the ACS poverty level.	Higher ratios of low- income population vs the regional average scored higher in the analysis.
NCTCOG EJI: Zero-Car Households by Census Block Group	2021	NCTCOG	Describes the number of housing units with no vehicle available.	Higher ratios of zero- car households vs the regional average scored higher in the analysis
NCTCOG EJI: Persons with Disabilities by Census Block Group	2021	NCTCOG	Any civilian, non- institutionalized individual with at least one disability that may limit the individual's ability to care for himself or herself.	Higher ratios of persons with disabilities vs the regional average scored higher in the analysis.
NCTCOG EJI: Population density by Census Block Group	2021	NCTCOG	Number of people per square mile.	Higher rates of population density vs the regional average scored higher in the analysis.

 $^{^{26}\ \}underline{\text{https://tea.texas.gov/academics/learning-support-and-programs/technology-planning/e-rate/e-rate-national-school-lunch-program-eligibility-data}$

Methods

NCTCOG EJI Analysis

The portion of the EJI analysis that used NCTCOG EJI data was completed using Excel and ArcMap 10.8.1. The analysis combined the various EJ census block group data sets within the MPA that are described above to identify the census tracts in areas characterized by the highest concentrations of environmental justice populations. For each data category, the EJI analysis summarizes the proportion of the census block group's relation to the

regional percentage population with the same attribute. Block group ratios with a value greater than 1 are categorized as a group with a population in certain а category above the regional percentage. Block groups with a value less than 1 are below the regional percentage.



Using ArcMap 10.8.1, ISD-level Free/Reduced Lunch (FRL) data was used to calculate the percentage of the total school population in the MPA that received free/reduced lunch.

The highest recorded percentage of students eligible for the FRL Program was 93 percent from eight schools in the cities of Everman and Fort Worth in Tarrant County. The lowest recorded score was zero percent, which was recorded by eight schools in the cities of Highland Park and Southlake. The most recorded average percentages of FRL-eligible students were between 58 percent and 64 percent, recorded by 459 schools. One hundred and one schools recorded an average percent of FRL-eligible students above 74 percent, suggesting those schools may have the highest environmental justice concerns.

Final Calculation

The final scoring calculation for the full analysis combined the five normalized EJI ratios and the FRL percentage for the highest possible score of 6. The ISD FRL score was added to each census block group. When a census block group spanned multiple ISDs, the average score for each ISD within the block group was calculated.

Results

The analysis was successfully run for 1,824 schools in the region that had the selected data available at the time of the analysis. The highest recorded score, which represents the block groups that contain school areas with the highest levels of EJ concern over the

scoring categories returned, was 3.5 for Frederick Douglass Elementary School in the City of Dallas, Dallas County. The lowest recorded score with the lowest levels of EJ concern over the scoring categories returned, was 1.4 for Lucy Mae McDonald Elementary in the City of Ferris, Ellis County. Seventy percent, or 1,346 schools scored less than 1.8, which represents school populations that may be of the lowest concern. Twenty-four percent, or 444 schools scored between a 1.8 and 2.8, which may represent school populations of moderate concern. Thirty-four schools scored greater than 2.8, which represents school populations of potential highest concern. Figure 33 is a distribution chart of all scores received by schools. Figure 34 summarizes the top 20 scoring schools in the five urban counties of the MPA, while Figure 35 summarizes the top 20 scoring schools by the seven rural counties in the MPA. Figure 36 illustrates EJ scores by block group, while Figure 37 illustrates FRL percentages by block group.

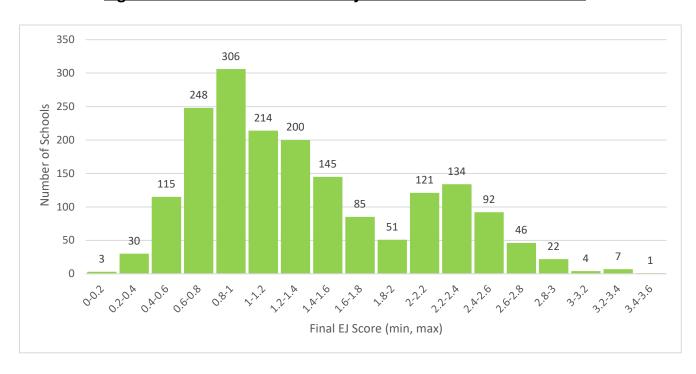


Figure 33: Distribution of Scores by School for Combined EJ Score

Figure 34: Top 20 Scoring Schools for the Combined EJ Score in the Five Urban Core
Counties in the MPA (Collin, Dallas, Denton, Rockwall, and Tarrant))

School Name	City	County	Final Score
Frederick Douglass Elementary School	Dallas	Dallas	3.5
Thomas A. Edison Middle School	Dallas	Dallas	3.4
DRC Campus	Dallas	Dallas	3.4
L.G. Pinkston High School	Dallas	Dallas	3.5
Jill Stone Elementary at Vickery Meadow	Dallas	Dallas	3.3
Elisha M. Pease Elementary School	Dallas	Dallas	3.3
Franklin D. Roosevelt High School	Dallas	Dallas	3.3
A.M. Pate Elementary School	Fort Worth	Tarrant	3.2
Joy James Elementary School	Fort Worth	Tarrant	3.2
Cesar Chavez Learning Center	Dallas	Dallas	3.1
H.I. Holland Elementary at Lisbon	Dallas	Dallas	3.1
Billy Earl Dade Middle School	Dallas	Dallas	3.0
Carroll Peak Elementary School	Fort Worth	Tarrant	3.0
I.M. Terrell Elementary School	Fort Worth	Tarrant	3.0
Fort Worth Can Academy	Fort Worth	Tarrant	3.0
I.M. Terrell Academy for STEM and VPA	Fort Worth	Tarrant	3.0
James Madison High School	Dallas	Dallas	3.0
Van Zandt-Guinn Elementary School	Fort Worth		3.0
Arlington Park Elementary School	Dallas	Dallas	3.0
J.N. Ervin Elementary School	Dallas	Dallas	3.0
Paul L. Dunbar Learning Center	Dallas	Dallas	3.0
Morningside Middle School	Fort Worth	Tarrant	2.9
John Neely Bryan Elementary School	Dallas	Dallas	2.9
D. McRae Elementary School	Fort Worth	Tarrant	2.9

Figure 35: Top 20 Scoring Schools for the Combined EJ Score in the Seven "Rural"

Counties in the MPA (Ellis, Hood, Hunt, Johnson, Kaufman, Parker, Wise)

School Name	City	County	Final Score
L.P. Waters Early Childhood Center	Greenville	Hunt	3.0
W.H. Burnett Elementary School	Terrell	Kaufman	2.9
Glen Oaks New Horizons Learning Center Greenville Alternative Educational Program	Greenville	Hunt	2.6
Carver Elementary School	Greenville	Hunt	2.5
Travis Elementary School G.W. Carver Early Childhood Center	Ennis	Ellis	2.5
Team School	Cleburne	Johnson	2.5
J.W. Monday Elementary School	Kaufman	Kaufman	2.4
Houston Elementary School Dorie Miller Intermediate School	Ennis	Ellis	2.4
Head Start Center	Cleburne	Johnson	2.3
Decatur High School	Decatur	Wise	2.0
Travis Elementary School Greenville 6th Grade Center	Greenville	Hunt	1.8
Ferris Intermediate School	Ferris	Ellis	1.7
J.F. Kennedy Elementary School	Terrell	Kaufman	1.7
Greenville Middle School	Greenville	Hunt	1.6
Keene Junior High School	Keene	Johnson	1.6
Central Elementary School Mabank High School Mabank Junior High School	Mabank	Kaufman	1.6
Bridgeport Intermediate School	Bridgeport	Wise	1.5
Russell P. Schupmann Elementary School	Glenn Heights	Ellis	1.5
Commerce High School	Commerce	Hunt	1.5
Lucy Mae McDonald Elementary School	Ferris	Ellis	1.5

Wise Denton Collin Hunt Rockwall Parker Tarrant Dallas Kaufman Johnson Ellis Highest possible score = 6 Legend Higher scores = higher degree of EJ concern County EJ Analysis Final Score 1.48 - 2.15 (791)

0.12 - 0.79 (722)

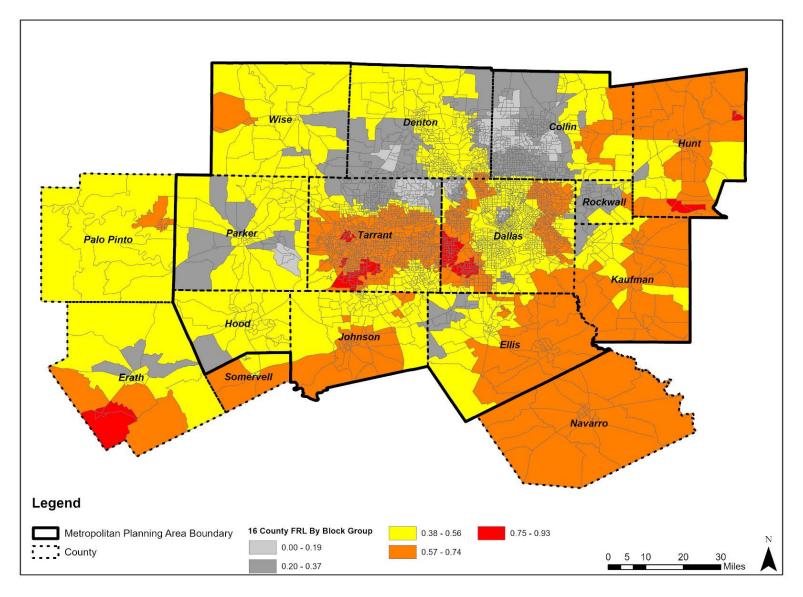
0.80 - 1.47 (1,700)

2.16 - 2.83 (851)

2.84 - 3.51 (94)

Figure 36: Combined EJ Score for MPA by Block Group

Figure 37: Percent Free/Reduced Lunch by Census Block Group for 16-County Region



Discussion

Charter schools were included in the EJ analysis; however, these populations may not fully conform to the EJ results because they do not have set attendance boundaries like standard public schools. While any school may have students traveling from outside the analysis area (Block Group) to reach their school, this is more likely for charter school populations.

This analysis is a useful tool to better understand the populations of the school and community to better guide land use and infrastructure planning decisions and regarding the allocation of limited resources.

Conclusions

With competing priorities, limited funding, and various data available for different locations, it is useful to understand different perspectives when evaluating schools. Though top scoring schools in each of the analyses may be a good beginning for understanding areas of highest need region-wide, this is not the end of this analysis. It is recommended that cities and ISDs conduct a localized analysis of Transportation Safety and Environmental Justice. The approach in this study is region-wide and reflecting NCTCOG's priorities as the region's MPO. Localized data on a county or city level would be more relevant to prioritizing improvements on a smaller scale and reflecting individual cities' needs and priorities.

Next Steps

- NCTCOG will continue to evaluate this analysis and update in the future with additional roadway safety and demographic data to ensure the tool is relevant and useful for planners as they make professional judgments regarding schools planning and funding.
- 2. NCTCOG will offer technical assistance to local governments to complete more localized analyses to assist in funding and planning prioritizations tailored to their communities.