



## Who We Are

Since 1990, the Operations Research and Education Laboratory (OREd) at the Institute for Transportation Research and Education (ITRE) has been working with LEAs across North Carolina and beyond to address sensitive school planning issues such as district membership forecasts, the location of new schools, consolidating existing schools, designing attendance zones, and demographic balancing. Using on-line and in-person tools as appropriate, OREd works with stakeholders across the community to help districts understand these issues scientifically and arrive at decisions that are equitable, comprehensive and efficient.

## What We Do

OREd utilizes an innovative approach called the Integrated Planning for School and Community (IPSAC) toolkit to assist decision makers in the school planning process. IPSAC encompasses a variety of services and specialized tools which typically include the following key components:

- **Comprehensive Land Use Studies** – OREd evaluates future student population growth/loss dynamics within the district with a high degree of resolution, using community stakeholder interviews coupled with Geographic Information System (GIS) and statistical analysis.
- **Membership Forecasting** – Based on the land use studies and historical membership data, system-wide membership forecasts can yield a broader sense of growth/loss dynamics within the district and may be used to analyze characteristics of specific student cohorts with the system.
- **Out-of-Capacity Analysis** – OREd uses these membership forecasts to project enrollment by school building over the next ten years.
- **School Site/Attendance Zone Optimization** – Different attendance zone scenarios are generated allowing district staff and board members to examine the effects on the LEA community based on clearly defined scenario assumptions. Model parameters such as building capacity and demographic balance may be adjusted to meet specific policy criteria.

## Our Engaging Approach

At OREd, we pride ourselves on working with the entire district community. We excel at communicating with parents, teachers, board members, and other key stakeholders through a variety of mediums and approaches. In collaboration with leaders like the Board of Education and the superintendent’s office, we devise appropriate two-way communication strategies.

OREd staff are skilled at utilizing a mixture of in-person and virtual activities to engage district and school stakeholders. We can effectively explain proposed scenarios and gather feedback on them, both at a distance and in person. Depending upon the size of the project and the needs of the district, we incorporate a variety of methods such as surveys, focus groups, town hall discussions, slideshow presentations, and video presentations. We are experienced with a range of online communication platforms that equip us to serve our clients well when virtual engagement is preferred.

Our engagement efforts are not limited to gaining input and buy-in from core district and school stakeholders. For instance, when resetting attendance zone boundaries, we first interview planners in local municipalities and private developers to create accurate forecasts for population and student growth. This comprehensive approach helps ensure that we provide decision-makers with the most accurate information available.

## Typical Service Bundles

OREd customizes the services offered based upon the needs of each LEA. The below table outlines the typical bundles of services utilized to address varying needs:

Services Offered	Service Levels				
	One	Two	Three	Four	Five
<b>Analysis-Based School Planning</b>	X	X	X	X	X
<b>Interviews with Local Planners</b>	X	X	X	X	X
<b>Student Enrollment Forecast</b>	X	X	X	X	X
<b>Geospatial Analysis Results and Interpretation</b>	X	X	X	X	X
<b>Presentations to School Board</b>	X	X	X	X	X
<b>Residential Housing Forecast</b>	X	X	X	X	X
<b>Final Report Development</b>	X	X	X	X	X
<b>Small Group Education Sessions with Board and School Leadership (interviews, focus groups, FAQs, etc.)</b>		X	X	X	X
<b>School-Based Community Meetings (in-person presentation and facilitation, virtual facilitation available)</b>		X	X	X	X
<b>Parent and Community Survey Design and Analysis</b>			X	X	X
<b>Community Engagement with Subgroups (roundtables, focus groups or interviews with groups like PTAs)</b>				X	X
<b>Community Engagement at Public Events (assist with tabling, in-person surveys, other engagement activities)</b>					X

## How to Reach Us

Thomas Dudley, OREd Program Manager  
[tedudley@ncsu.edu](mailto:tedudley@ncsu.edu) (919) 515-7931