

**Southwest Region University Transportation Center  
Project Proposal - FY 2013**

TITLE OF PROPOSED PROJECT: TRANSPORTATION AND ACCESS TO  
OPPORTUNITY: METROPOLITAN SIZE, USER EXPERIENCE, AND EMPLOYMENT  
QUALITY

STRATEGIC GOAL(S) ADDRESSED: LIVABLE COMMUNITIES, ECONOMIC  
COMPETITIVENESS

CONSORTIUM MEMBER: UNO

TOTAL PROJECT BUDGET: \$23,317 (UTC Funds)

PRINCIPAL INVESTIGATOR: KATE LOWE  
PHONE NUMBER: 617-909-6144  
EMAIL ADDRESS: KATE.LOWE@UNO.EDU

HAS THIS PROPOSAL BEEN SUBMITTED FOR FUNDING ELSEWHERE? Y

DID THIS PROPOSAL RECEIVE FUNDING FROM ANOTHER SOURCE? Y [pilot phase]

DOES THIS PROPOSED RESEARCH INVOLVE THE USE OF HUMAN SUBJECTS? Y

WILL THIS PROPOSED RESEARCH INVOLVE OTHER ORGANIZATIONS AS  
PARTNERS?\* Y

PROJECT MONITOR NAME, ORGANIZATION, ADDRESS AND TELEPHONE  
NUMBER:\*

Jason Sappington, AICP  
New Orleans Regional Planning Commission  
10 Veterans Blvd, New Orleans, 70124  
504-483-8507

ABSTRACT OF PROJECT:

This project will deepen current understanding of accessibility to quality jobs for low-income residents in Louisiana and adapt access indicators for medium-sized metropolitan areas more generally. The project will 1) compare quantitative measures and qualitative accounts of low-income users' experiences accessing jobs and opportunity; and 2) identify sustainable wages by parish, consider skills matches, and document transportation and other barriers to quality jobs. Findings will be useful for transportation, workforce development, and housing policy makers locally and for the field of transportation accessibility research more generally.

## Budget

	UTC Amount
<i>Salaries</i>	
Kate Lowe	
Kate Lowe	
Total Salaries	
<i>Fringe (41%)</i>	
Graduate Assistants	\$ 14,640.00
<b>Total Salaries and Benefits</b>	<b>\$ 14,640.00</b>
Travel	\$ 600.00
Operating Services	\$ 314.00
Professional Services	\$ 750.00
Other (participant stipend)	\$ 2,500.00
<b>Total Direct Costs</b>	<b>\$ 18,804.00</b>
Indirect Costs (24%)	\$ 4,513.00
<b>Total Budget</b>	<b>\$ 23,317.00</b>

### A. Project Problem Statement

For more than half a century, research has identified physical access to jobs as a barrier to employment and earnings. Despite a long-standing “spatial mismatch” (Kain 1968) between suburban entry-level jobs and low-income workers, urban cores still have numerous entry-level jobs (Blumenberg, 2002). Research shows that centrally located neighborhoods may still offer robust access to jobs via the transportation network—at least in the large metros commonly studied (for examples see Grengs, 2010; Hess, 2005). Transportation assessments of job access typically focus on travel time by counting the number of low-wage jobs located within a specified travel time from the neighborhood of study (for example, see CTPS, 2009). These assessments, however, typically do not incorporate whether jobs provide sufficient wages to support a household or whether jobs fit the skills, schedules, and other constraints of low-income workers.

### B. Background

Planning tools and transportation research on physical access thus have three critical limitations. First, existing approaches do not explore the extent to which count-based assessments align with the travel behavior of and accessibility experienced by low-income workers. Experienced accessibility may differ more by individual than by spatial zone, as travel behavior does. The limited studies that do document how low-income households experience access to jobs or

services (Boschmann, 2011; Clifton, 2004) demonstrate that current measures might not account for dynamic life circumstances or context specific challenges and opportunities. For example, proximity to and even frequency of transit is only one component of physical accessibility. Existing studies do not typically account for employer-based shuttles (an enhancement to physical access to employment) but neither do they consider work schedules (which can mean reduced access to employment).<sup>1</sup> Other essential opportunities and place-based attributes—quality education, affordable green space, healthcare, a safe public realm—are also part of neighborhood quality of life and affect whether residents experience accessible opportunities. The complexity of these factors, as well as existing residential segregation, demonstrate the need for careful consideration of unintended consequences from housing and transportation policy integration (see Tegeler, 2013).

Second, analysis of accessibility and housing affordability has usually focused on large metropolitan areas. Whether appropriate measures might differ for smaller regions is less studied and an important question for Louisiana, where most metropolitan residents live in small and medium-sized metros (see Figure 1). As the table below shows, the supermajority of US residents live in metropolitan areas, a significant share in the largest metropolitan areas. Yet, 90 million Americans are located in metropolitan areas with populations between 100,000 and 1,000,000. Another 30 million live in MSAs between one and two million in population. What is accessibility like for low-income households in these metropolitan areas? How does it differ among these metros and from large metros? Research and policy studies have not yet explored whether standard measures capture these urban contexts.

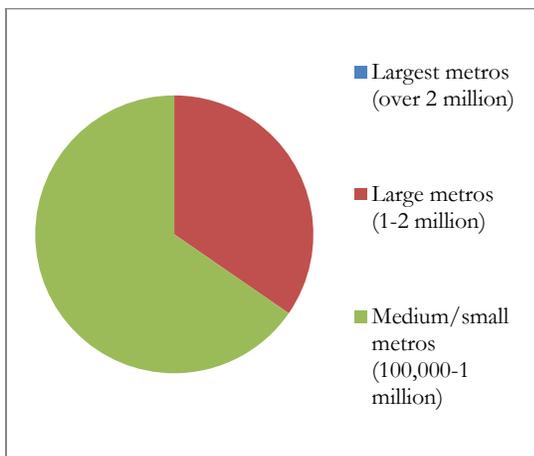


Figure 1: Louisiana's metropolitan population by metropolitan area size (Authors' calculations based ACS 2010, 1-year estimates; population in micropolitan statistical areas or metropolitan statistical areas with less than 100,000 residents excluded)

<sup>1</sup> Columbus, Ohio-area residents recounted how high-wage jobs were sometimes spatially accessible through employer shuttles and/or transit, but that the transit schedule terminated too early in the evening to allow for second and third shift work schedules (Boschmann, 2011).

	United States			Louisiana	
	Count	Average population	Combined population	Count	Combined population
Largest metros (over 2 million)	30	4,607,127	138,213,822	0	0
Large metros (1-2 million)	22	1,443,717	31,761,784	1	1,173,327
Medium/small metros (100,000-1 million)	297	304,036	90,298,729	7	2,216,071

Table 1: MSA population by size (Authors’ calculations based ACS 2010, 1-year estimates; population in micropolitan statistical areas or metropolitan statistical areas with less than 100,000 residents excluded)

Third, studies fail to account for occupational quality, skill matches, and other workforce development challenges. While transportation models may filter jobs or job openings by wage level, they do not address underemployment. Families typically cannot subsist—without public assistance—at poverty-level incomes. In some industries, entry-level jobs with livable wages are available, while in other industries, moderate wages are only possible with extensive education or training. Thus, analysis of job access should consider whether livable wage jobs exist and whether the low-income workforce has the skill sets and education required to fill those particular jobs. When accounting for job quality, how do assessments of job access change? How does transportation intersect with other job barriers—such as skills mismatches? Job quality questions merit more research, as does the intersection of transportation, other barriers, and the role of job intermediaries (see Chapple, 2006).

### C. Objectives of Study

This research examines accessibility to quality, sustainable wage jobs and other opportunities in medium-sized metropolitan areas, providing an in-depth look at how quantitative assessments relying on secondary data align with or differ from the experiences of low-income households across different metropolitan sizes. It is part of an ongoing partnership to understand accessibility in varied contexts and provide information for policy makers in transportation planning, workforce development, and housing policy to ensure that policies are coordinated to best support expanded access and opportunity in Louisiana and beyond.

### D. Work Plan (including task number, name and descriptions)

The research will use mixed methods to document and enrich knowledge about access to opportunities and sustainable-wage jobs. First, the project compares existing measures to the experiences of low-income residents in medium and small metropolitan areas. Do commonly used indicators of transportation-related physical accessibility, based on secondary data, align with experiences and challenges workers identify in reaching jobs? Second, we will consider local costs of living to understand sustainable wage rates for households. When accounting for job quality, based on the living wage by county/parish, does job accessibility look the same? How does this differ by metropolitan region and context? By relying on a mixed-methods research design, we will document accessibility—as currently measured—across different levels of urbanization and provide complex accounts of accessibility challenges and experiences in

neighborhoods with substantial numbers of low-income households. This analysis will cover two regions, with further in-depth spatial analysis of and qualitative data collection in two neighborhoods within each region.

This project will leverage preliminary assessments done by UNO students, with support of the UNOTI, for Lafayette and Baton Rouge (May 2013). Their assessments will build on existing opportunity mapping research (Reece & Gambhir, 2008), but strengthen such indexes by adding transportation components. In each of the two metropolitan areas, students will identify zones with high concentrations of affordable housing and/or concentrations of low-income households.

In each of the four neighborhoods (two in Baton Rouge and two in Lafayette), research assistants and principal investigators will conduct 10-15 interviews with adults in low-income households (total of 40-60). Findings are not intended to be statistically representative, but instead allow insights into the strengths and weaknesses of conventional analyses of access, especially for medium and small metropolitan areas. We expect to find instances in which accessibility is both under and overestimated by zone-focused analysis. Research will identify tools for interpreting individual characteristics and time constraints, as well as adaptations made by participants to increase opportunity.

Second, we will deepen job access analysis by considering job quality and skills matches. To identify sustainable wage jobs in the study regions, we will utilize economic security indices to determine the wage level necessary to support economic security and self-sufficiency. Economic security indices, developed by Wider Opportunities for Women, are a measure of the basic needs workers require for economic security. The indices provide a comprehensive picture of the costs in a specific geographic area by considering the costs of housing, utilities, food, transportation, child care, health care, emergency savings, retirement savings, and taxes. We will utilize these parish-specific indices and occupational wage data from the *Louisiana Occupational Employment and Wage Survey* to identify distinctive occupation specializations or clusters in each study region and occupations within those clusters that provide an annual wage that supports economic self-sufficiency. After identifying “sustainable” occupations, we will cross reference the Standard Occupational Codes (SOC) with BLS’ Occupational Outlook Handbook files to determine the education and training requirements for each occupation and determine their suitability for low-skilled workers and opportunities for advancement.<sup>2</sup> This will allow us estimation of jobs by occupation available in the MSA that support economic self-sufficiency.

- E. Schedule of Activities (starting with 6/13)
  - March-April 2013: UNO class analysis
  - May-July 2013: Pilot interview instrument
  - Fall 2013- Spring 2014: Wage analysis
  - May-July 2014: Qualitative interviews
  - August-September: Qualitative analysis
  - October-November 2014: Report write-up
  - January 2015: Article draft

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<sup>2</sup> See Nelson & Wolf-Powers (2010) on the challenges and potential of some sectors for improving wellbeing for low-income workers.

Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.Pilot interview tool	■	■															
2.Sustainable wage analysis				■	■	■	■	■	■	■							
3.Qualitative interviews											■	■	■				
4.Interview analysis														■	■		
5. Analysis and report															■	■	■

F. Anticipated Deliverables or Products to be Produced by this Study:

- The PI anticipates submitting abstracts to present at annual meetings held by the Transportation Research Board and the Association of Collegiate Schools of Planning.
- Researchers will also submit articles to peer-reviewed journals (e.g. Transport Policy or Journal of the American Planning Association).

G. Plan to Pursue Additional Funding after Conclusion of SWUTC Project

The near-term goal of the project is to understand workforce accessibility and opportunity in two medium-sized metropolitan areas. The next phase would test whether findings from medium-sized metropolitan areas in Louisiana apply to other medium-sized metropolitan areas. Findings may further challenge the tools designed for large metropolitan areas that are currently deployed. Researchers and policy-makers use these tools despite a lack of evidence for validity and applicability to smaller metropolitan contexts. Without initial findings, however, making the case for federally supported, national comparative work is difficult. With findings that show contextual variability and the limits of current measures, a federal proposal would be far more viable.

The US Department of Transportation (and related or subordinate agencies such as the Federal Transit Administration) issue periodic requests for proposals. Increasingly, other federal agencies—especially those working on housing or workforce development—see the relationships across workforce development, community and housing policy, and transportation. Any of these federal entities could create funding opportunities, and philanthropic foundations may also fund national research.