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Use of LED Data in Estimating Jobs Accessed through the Federal JARC Program

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What is JARC?

- Federal Transit Administration established the Job Access and Reverse Commute grant program in 1999
- Program has two major goals:
 - Help low-income individuals overcome the transportation barriers to find and keep jobs
 - Address challenges of accessing suburban jobs
- Grantees provide FTA with annual updates on service delivery and program performance

JARC Performance Measures

ONE-WAY TRIPS

- Standard transit statistic that is easy for most organizations to collect and report
- BUT...Doesn't relate directly to project goals of helping people get to work

JOBS ACCESSED

- Difficult to measure, especially for transit organizations, and not always directly related to service
- BUT...Intuitive measure that relates directly to JARC goals of helping people get to work

The challenge

Find a way for JARC grantees to collect and report data about jobs accessed

The goal

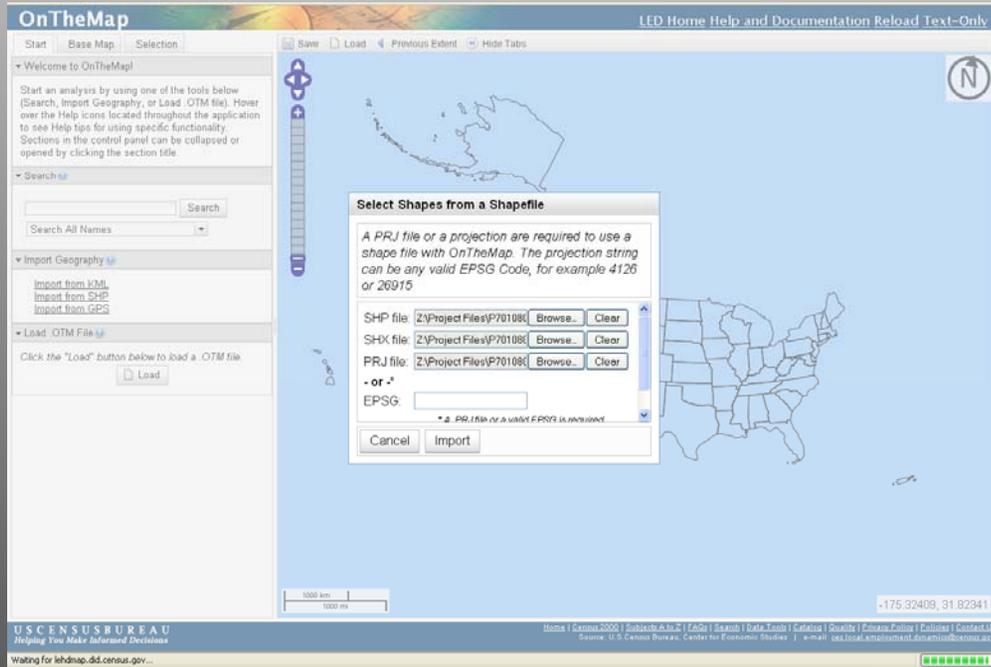
Develop a relationship between jobs made accessible and one or more standard transit statistics

The solution

Develop a jobs density factor to estimate jobs accessed

Methodology Overview

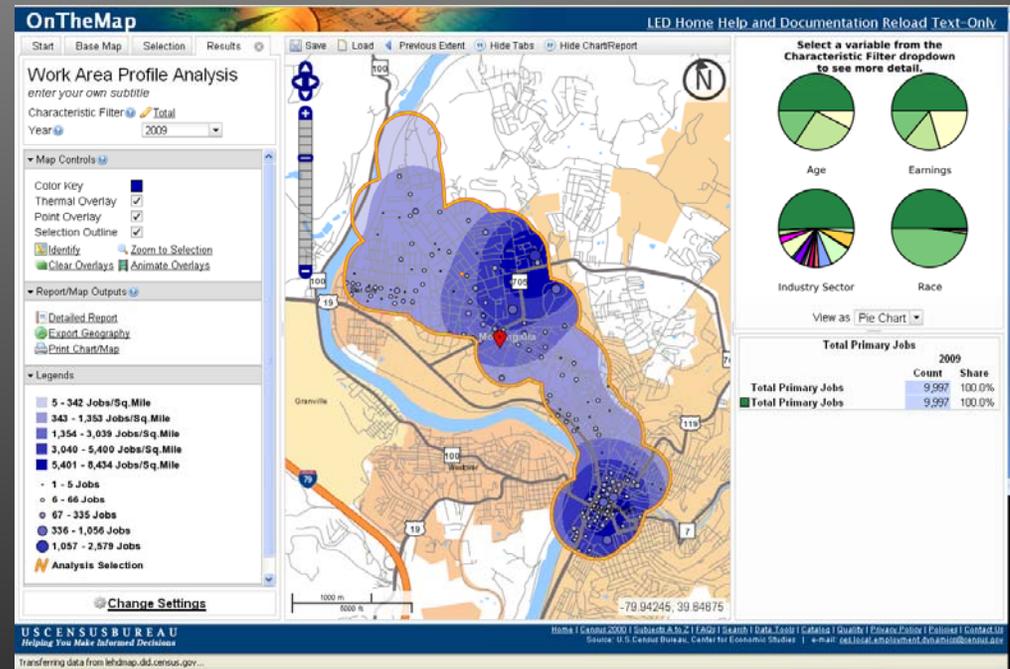
- Select sample of JARC services
- Obtain route maps
- Use GIS to digitize route and create buffer
- Upload buffer to OnTheMap and create desired reports within buffer area
- Calculate jobs in buffer by NAICS code
- Adjust for low-wage jobs
- Adjust for jobs likely reached



.shp buffer file uploaded to OnTheMap



OnTheMap result



Job reported created and exported to Excel



Adjust for low-wage jobs



Determine jobs likely reached

Total All Jobs	2008		2007		2006	
	Count	Share	Count	Share	Count	Share
Total All Jobs	10,523	100.0%	9,787	100.0%	9,216	100.0%
Jobs by Worker Age						
	2008		2007		2006	
	Count	Share	Count	Share	Count	Share
Age 30 or younger	3,492	33.2%	3,144	32.1%	2,954	32.1%
Age 31 to 54	5,445	51.7%	5,210	53.2%	4,961	53.8%
Age 55 or older	1,586	15.1%	1,433	14.6%	1,301	14.1%
Jobs by Earnings Paid						
	2008		2007		2006	
	Count	Share	Count	Share	Count	Share
\$1,250 per month or less	3,585	34.1%	3,438	35.1%	3,379	36.7%
\$1,251 to \$3,333 per month	3,155	30.0%	2,934	30.0%	2,968	32.2%
More than \$3,333 per month	3,783	35.9%	3,415	34.9%	2,869	31.1%
Jobs by Industry Type (2-digit NAICS)						
	2008		2007		2006	
	Count	Share	Count	Share	Count	Share
Agriculture, Forestry, Fishing and Hunting	21	0.2%	12	0.1%	11	0.1%
Mining, Quarrying, and Oil and Gas Extraction	143	1.4%	146	1.5%	92	1.0%
Utilities	61	0.6%	61	0.6%	85	0.9%
Construction	260	2.5%	244	2.5%	210	2.3%
Manufacturing	2,050	19.5%	1,798	18.4%	1,783	19.3%
Wholesale Trade	412	3.9%	362	3.7%	123	1.3%
Retail Trade	802	7.6%	783	8.0%	777	8.4%
Transportation and Warehousing	41	0.4%	36	0.4%	24	0.3%
Information	214	2.0%	179	1.8%	157	1.7%
Finance and Insurance	288	2.7%	283	2.9%	275	3.0%
Real Estate and Rental and Leasing	153	1.5%	182	1.9%	199	2.2%
Professional, Scientific, and Technical Services	706	6.7%	641	6.5%	628	6.8%
Management of Companies and Enterprises	35	0.3%	30	0.3%	37	0.4%
Administration & Support, Waste Management and Remediation	279	2.7%	185	1.9%	231	2.5%
Educational Services	721	6.9%	727	7.4%	742	8.1%
Health Care and Social Assistance	1,075	10.2%	996	10.2%	989	10.7%
Arts, Entertainment, and Recreation	91	0.9%	157	1.6%	161	1.7%
Accommodation and Food Services	2,052	19.5%	1,888	19.3%	1,750	19.0%
Other Services (excluding Public Administration)	341	3.2%	322	3.3%	198	2.1%
Public Administration	778	7.4%	755	7.7%	744	8.1%
QWI Indicators - Private Sector Jobs						
	2008		2007		2006	
	Count	Share	Count	Share	Count	Share
Number of Employers	-	NA	-	NA	553	100.0%
Employment (Beginning-of-2nd quarter)	-	NA	-	NA	6,541	100.0%
Employment, Stable Jobs	-	NA	-	NA	5,629	100.0%
Separations, Stable Jobs	-	NA	-	NA	572	100.0%
New Hires, Stable Jobs	-	NA	-	NA	645	100.0%
Firm Job Gain	-	NA	-	NA	415	100.0%
Firm Job Loss	-	NA	-	NA	308	100.0%
Employment (reference quarter)	-	NA	-	NA	8,090	100.0%
Average Monthly Earnings, Stable Jobs	-	NA	-	NA	2,061	100.0%
Average Monthly Earnings Separations from Stable Jobs	-	NA	-	NA	787	100.0%
Average Monthly Earnings, New Hires, Stable Jobs	-	NA	-	NA	1,429	100.0%
<i>Quarterly Workforce Indicators (QWI) in OnTheMap are considered to be experimental. For the latest and most accurate QWI</i>						
Data Sources						
US Census Bureau, LED OnTheMap Origin-Destination Database(Beginning of Quarter Employment, 2nd Quarter 2008, 2007, 2006, 2005, 2004, 2003, and 2002)						

Results of FY 2009 Analysis

Type	All Jobs		Low-Wage Jobs		Likely Jobs	
	#	%	#	%	#	%
Fixed	26,004,688	50%	12,222,862	48%	5,748,984	75%
Flex	1,984,351	4%	932,695	4%	678,895	9%
Shuttle	2,757,128	5%	1,295,920	5%	263,753	3%
Demand	21,028,242	41%	10,805,912	43%	1,004,991	13%
Total	51,774,408	100%	25,257,389	100%	7,696,623	100%

Why Use LED Data?

- LED is the only single source of free jobs information linked to Census geography
- Factor provides snapshot of job market
- Communities can apply methodology to develop local estimates

Considerations

- Jobs density factor was designed to work on national aggregate level
 - Can't "unroll" the data for local estimates
 - May not reflect unique local conditions
- Gaps in LED during analysis time frame

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