Importance of Bus Connections to Light Rail Accessibility Gains



Andrew Guthrie - Yingling Fan - David Levinson National Light Rail & Streetcar Conference, 11/17/15



Versus?





Most of system

Social equity concerns

Versus?

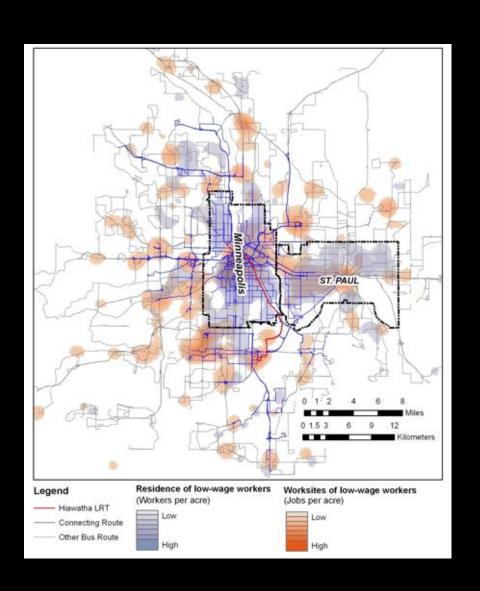
Local mobility gains

Limited areas

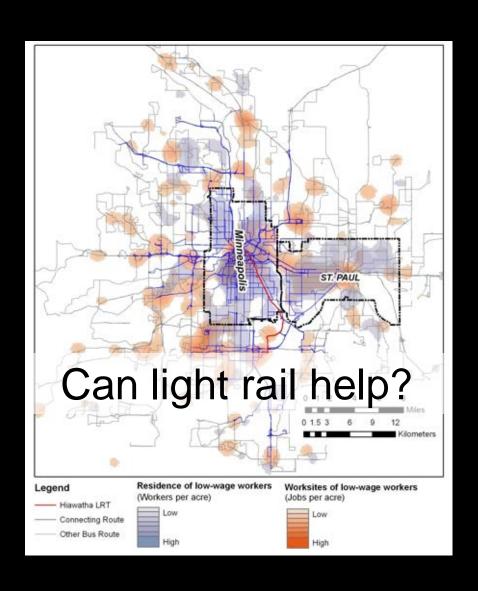
Chasing choice riders?



Spatial Mismatch



Spatial Mismatch



Area Types

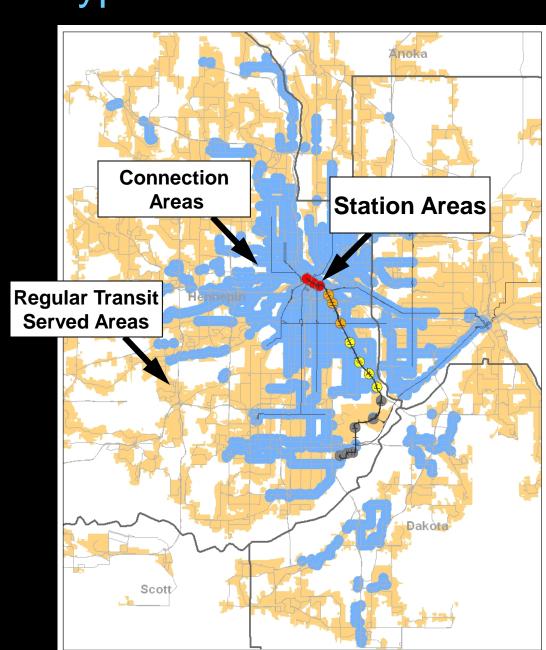
Station areas

Connection areas

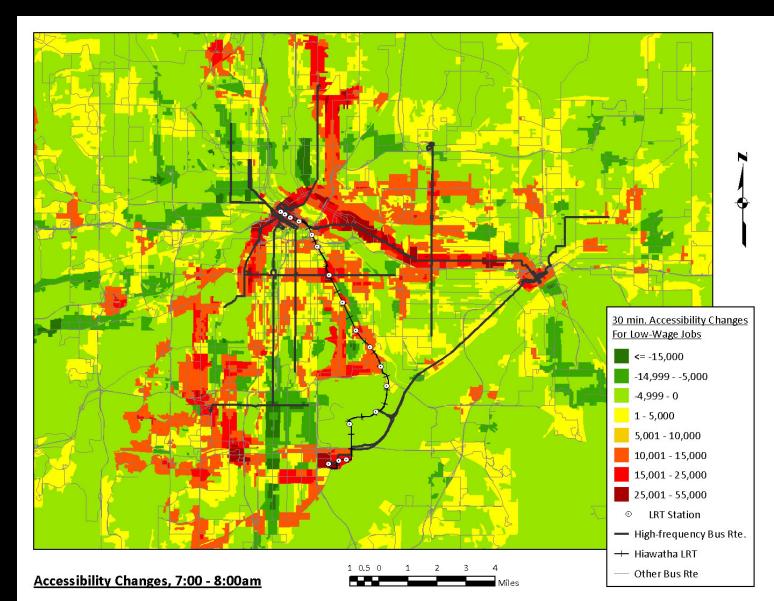
direct connection

<= 30 mins

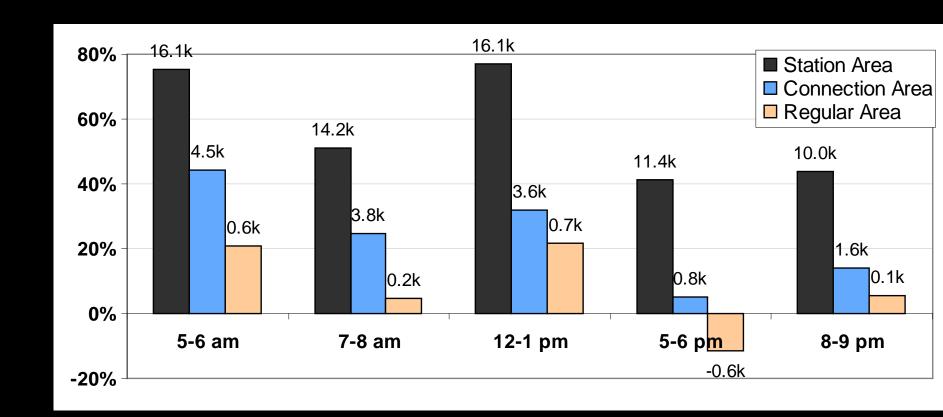
22% metro population



Accessibility Changes: Morning Peak—7am-8am



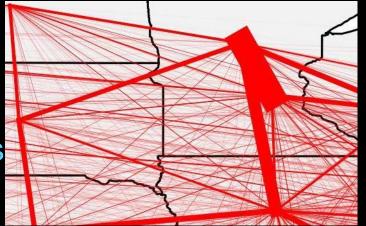
Low-wage accessibility change



Commute Flow Impacts

Accessibility gain = realized benefits?

Change in "transit possible" O/D pairs



Change: Low-Wage Workers & Jobs

Area Categories	<u>WORKERS</u> Moving In		<u>JOBS</u> Moving In	
	Total workers	Average (Per BG Pair)	Total jobs	Average (Per BG Pair)
Downtown Hiawatha	103	0.123	2,258	0.543
North Hiawatha	593	0.202	-300	-0.070
South Hiawatha	124	0.047	-134	-0.061
Suburban Hiawatha	4	0.019	347	0.154
Bus Connections	14,134	0.108	12,788	0.103

Conclusions

Rail versus bus

Rail and bus

Equity concerns, but potential for benefits.

Need to plan around connections

TOD

Economic development

Affordable housing



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Thank you!