

# The Light Rail Line: The Effects of an Expansion

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## Current Transportation in Buffalo, NY

- Metro rail line opened in 1984, \$535 million
  - 6.4 miles long, 5.4 miles underground
  - Serves 23,000 daily
  - Takes approximately 22 minutes to travel from University Station to Erie Canal Harbor
  - Old technology, from the late 1970's is still in use
- NFTA buses
  - 332 Buses, serving 94,000 people daily
- University at Buffalo Transportation
  - Serves approximately 2.5 million riders per year
- Highways are very accessible to the city of Buffalo and its surrounding areas



## Effects of the Existing Light Rail Line on Buffalo

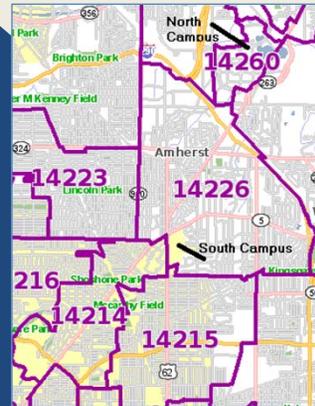
- Projected Effects from the 1970's
  - Increased accessibility to downtown
  - Development of businesses near the line as well as economic stimulation
  - Reduction of vehicular traffic in the area near the line
  - Increased congestion near above ground portion of line due to closure of Main St.
- Actual Effects of the Line
  - Decreased population in downtown Buffalo
  - Lower ridership than projected
  - Property values are higher for homes within a half mile of the rail line

## Light Rail Lines in Other Cities Have Had Beneficial Effects

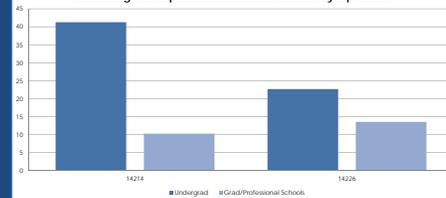
- Buffalo is the only city with an older line that has not expanded its rail system
- Rail line construction revitalizes the area in which it is built in most cases
- Sacramento, CA
  - Population size similar to Buffalo
  - 18.3 miles built in 1987, later expanded to 20.6 miles
  - Serves 30,000 people daily
  - Costs for building were cut by using railroad right of ways and an abandoned interstate project for several miles, approximately \$228 million
- Miami, FL
  - Metrorail opened in 1984, 22.6 miles long, serves 61,700 people per day
  - Metromover opened in 1986, 1.9 miles, extensions of 1.1 miles and 1.4 miles added in 1994
  - In order to cut costs and boost ridership, Metromover stations with low ridership were closed and bus routes were rerouted to feed into the open stations
- St. Louis, MO
  - Population size similar to Buffalo, NY
  - St. Louis has also suffered a significant decline in population in the city due to suburbanization
  - First opened in 1993, with several extensions added in 1998, 2003, 2006 and continuing with the current 30 year plan
  - More than \$2 billion of development has occurred near Metrolink since it has opened
  - 87% of citizens view a light rail system as important to the community's quality of life

## Expansion and the University at Buffalo

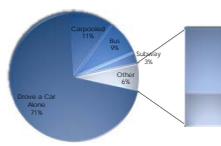
- In the areas surrounding both North and South campus a significant number of the population are enrolled in school as undergraduates or as professional and graduate students.
- The majority of people in these areas commute to work in a vehicle alone.
- At UB, 93% of the campus community travels to campus in a vehicle alone daily
- A light rail extension from South Campus to North Campus would benefit the University as well as the areas surrounding it.
  - Travel between campuses would be faster
  - Parking would be less congested for those who continued to drive to campus
- The UB2020 plan incorporates a new plan to reduce traffic for the three campuses. Several options, including high speed busses, modern streetcars and an extension to the light rail line are being considered.



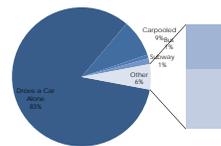
Percentage of Population Enrolled in School by Zip Code



Modes of Transportation to Work for Zip Code 14214



Modes of Transportation to Work for Zip Code 14226



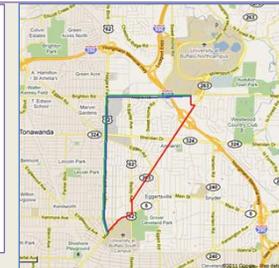
## Economic Reasons for Light Rail Transit

- Light rail lines have been known to revitalize the area in which they have been built.
- They are also considerably cheaper than running busses
  - They hold more people than busses
  - A line can run on electricity rather than on gas, benefiting the environment as well as the budget.
- Light rail runs faster than busses even when integrated with other traffic due to methods such as right of ways.
- Passengers can save on the costs of commuting to work including gas and time.

## Effects of an Expansion in Buffalo, NY

- A computer program was developed to determine the shortest distance between campuses. It was also used to account for the speed limits of the streets and the number of lanes on each street.
- The red route represents the shortest distance between North and South Campus, at 3.26 miles.
- The blue route represents the fastest way to get from South to North Campus by analyzing the speed limits of each road. This path is 4.13 miles long.
- The green and blue route pass by several businesses, restaurants and stores, including the mall and grocery stores, while the red route goes through more residential areas than businesses.
- Expanding the light rail line on the green and blue route would be most beneficial to the area, even though it is a longer distance.
- Some positive effects of the line include:
  - Increased revenue for the business near the new expansion
  - People living near the University will gain an inexpensive way to get to and enjoy downtown
  - Increased activity downtown will help to revitalize the city

- An extension in this area would be especially useful and beneficial to the area
  - It has been found that those who live in the suburbs of a city are more likely to take a light rail line or subway than a bus.
  - A significant number of people residing in the zip codes near UB already carpool or take public transit to get to work.



## Summary

The current light rail line in Buffalo, NY is only 6.4 miles long. The construction was very expensive, costing about \$83.6 million per mile in 1984. The hopes for the line to revitalize the city failed as the population decreased due to suburbanization. Now almost 30 years later, an expansion from the end of the current line to the University at Buffalo's North campus, if done correctly, would help to connect the city to some of its suburbs and reverse the effects of suburbanization. The cut and cover technique used for the underground portion of original line made the cost per mile much higher than it should have been and so the new line would have to be constructed inexpensively, running on streets along with vehicular traffic. The map above depicts possible routes on which the line could run. An expansion will provide a connection between the City of Buffalo and its suburbs, allowing people to go into the city inexpensively, spurring new development downtown and boosting the economy.