



Rochester Downtown Transit RDT **Elevated Urban Transit for The 21st Century!**



My Vision

- Rochester and the Mayo Clinic deserve a 21st Century transit solution
- The transit solution must be:
 - Safe
 - Cost effective in capital and operating costs
 - Energy Efficient
 - Quiet
 - Accessible
- Therefore: *Let's Elevate Rochester!*



Comparison Factors



	BUS	STREETCAR	ELEVATED
	★★★★		
CAPITAL COST	★	★★★	★★
OPERATING COST	★★	★★★	★★★★★
MAINTENANCE	★★★★	★★	★★★★★
WEATHER	★★	★★★	★★★★★
FLEX CAPACITY	★★	★★	★★★★★
NOISE POLLUTION	★★	★★	★★★★★
ACCESSIBILITY	★★	★★	★★★★★
STREET IMPACT	★★	★	★★★★★
OPERATOR COST	★★	★★	★★★★★

KEY(5 Star Best)	Best	Better	Good	Fair	Poor
	★★★★	★★★★	★★★	★★	★★
	★				



Timeline



January 2013-DMC Begun as 20 year plan of the Mayo Clinic

January 2015 DMCC Board Adopted Draft Plan

September 2015? Public Works Assumes Transit Duties (SRF)



Challenges



- **The Mayo Clinic**
 - Doubling the research space
 - e.g. Discovery Square plan 2M sq. ft. -new
 - Adding 15,000 employees
- **City of Rochester:**
 - Adding 35,000 employees (including Mayo)
 - Increasing population from 110,000 to 200,000



Rochester Transit Now



- **All Surface Vehicles:**
 - **City Buses**
 - **Private Vans**
 - **Mayo Employee Vans**
 - **Taxis**
 - **Private Autos**
- **There is no space left on the surface to expand**
- **Therefore: *Let's Elevate Rochester!***



Transit in the USA



- **Light Rail, Green Line, MSP (\$100M/mile)**
- **DisneyWorld-Orlando, FL-monorail**
- **Jacksonville, Skyway, Jacksonville, FL**
- **AirTrain, SFO Airport, CA**
- **Clarian-Indiana University Healthcare**
 - Indianapolis, built by Schwager Davis
 - \$30M/mile capital cost
 - Operating for 15 years without accident



International Transit



- **Shinkansen-Tokyo to Osaka, Japan**
- **KTX-Seoul to Daegu, Korea**
- **Hannover to Frankfurt, Germany**
- **Hong Kong**
- **Singapore**
- **Taipei, Taiwan**
- **Bangkok, Thailand**



Considerations for Transit Design

- **What is the ridership capacity needed at shift times?**
- **What are the commuting patterns?**
 - **Where do they originate?**
 - **What is their destination?**
 - **How do they move during the workday** (e.g Gonda-St. Mary's)
- **Who are the potential riders?**
 - **Doctors, Nurses, other Mayo Employees**
 - **Patients, Caregivers, Residents, Visitors**



The Rochester Solution



- **We know that many Mayo employees:**
 - **Park at Cascade Lake surface lot-1000 cars at peak**
 - **Many take Mayo's commuter bus to:**
 - **St. Mary's Hospital**
 - **Mayo Clinic**
 - **Methodist Hospital**
 - **Other sites**
- **Using the riders who start at Cascade:**
 - **Let's look at what elevated transit can do!**



In Summary



- **Elevated Transit is required in Rochester because:**
 - The population will double in 20 years
 - It gives safe access direct from buildings
 - It is the only convenient transit for the disabled
 - It can be used to transport supplies and equipment
 - It keeps riders from the effects of weather
 - It is scalable and responds to demand, not a schedule
 - It is quiet
 - Not obtrusive (no overhead wires, tracks on the street)
 - **Consider maglev for quiet, efficient operation!**