# Vision and Scale

The following design strategies are proposed for the Manchester transportation network:

- Establish a streetcar grid that services all sectors of the district and forms the backbone of the transportation matrix
- Reallocate road space to bicycle lanes
- Implant infrastructure that will accommodate bicycle use
- Create pedestrian friendly streets through traffic calming measures, and larger more extensive sidewalks • Establish a connected network of green corridors and pathways throughout the district
- Build a third LRT station where 50th Avenue SW meets the current line
- Establish Manchester as the Calgary end of line for the regional high speed rail system
- Use the existing CP/CN rail branch lines to facilitate the movement of goods, services and people
- Promote electricity as the primary source of power for transportation wherever possible



Projected Daily Ridership by Mode (in 1,000s)



Projected Capital Costs for Transportation Infrastructure (in 2012 dollars)				
Transit Mode	Element	Number of Units	\$/Unit	Total
Street Car	Track	12.5 km	\$15 M	\$187.5 M
	Cars	200	\$500,000	\$100 M
	Stations	25	\$100,000	\$2.5 M
	Maintenance Barns	8	\$1.2 M	\$9.6 M
	Greening of Corridors	82,500 m <sup>2</sup>	\$20	\$1.65 M
			Subtotal	\$301.3 M
Bicycles	Lanes	72 km	\$50,000	\$3.6 M
	Stations	7	\$8 M	\$56 M
	Parking (covered)	50	\$25,000	\$1.25 M
	Parking (pole and loop)	500	\$750	\$375,000
			Subtotal	\$61.3 M
Greenway	Paths and Landscaping	8.8 km	\$400,000	\$3.52 M
	Burying of Powerline	I.8 km	\$4 M	\$7.2 M
			Subtotal	\$10.8 M
Streets	Neckdowns (intersections)	6,000 m <sup>2</sup>	\$85	\$510,000
	Sidewalks	170,000 m <sup>2</sup>	\$80	\$13.6 M
	Boulevards	15,000 m <sup>2</sup>	\$80	\$1.2 M
			Subtotal	\$15.4 M
Pedestrian Streets	Pedestrian/Bike Boulevards	97,500 m <sup>2</sup>	\$80	\$7.8 M
			Subtotal	\$7.8 M
LRT and Heavy Rail	LRT Station	2	\$15 M	\$30 M
			Subtotal	\$30 M
			Total	\$426.6 M

Crime - Emphasis on active transportation

means more eyes on the street.

Community

Indicators

conomi

ndicators

Leisure Activity - More greenways,

Sense of Community - Compact,

energy demand per person.

# Sustainability Indicators

Preventative Health Care - Greenways, parks, bicycle lanes and sidewalks all promote physical activity.

ealth and Wellnes

Indicators

Invironment

Indicators

Youth Obesity - Parks provide space for youth ( recreation programs.

Self-Rated Health - The opportunity to connect with the natural environment, and live in a healthy neighbourhood increases self awareness.

Childhood Asthma - Fewer automobiles reduces smog and other air pollutants.

Education Indicators

Air Quality - Fewer automobiles, and increased active transportation results in fewer GHG emissions and better air quality.

Water Quality - A network of greenways helps combat urban \_\_\_\_\_ runoff and fewer automobiles means less oils, chemicals, and road salts washed into water systems.

> Food Grown Locally - A network of green parks and paths provides potential for productive space.

Sprawl - Compact TODs result in shorter travel distances and a small block, grid



reliance on renewable energy sources. Transit Usage - A projected modal split places transit usage at 45%.



### Transportation Sustainability Triangle



# MANCHESTER TRANSPORTATION 2050

## Rail Network

#### Green Network



parks, and bicycle lanes provide more opportunity for recreation. pedestrian friendly development allows more opportunity for social interaction.

> Economic Diversification - A reduction in automobile dependency will stimulate development of other industries and services; car-free households spend less on transportation and have surplus income.

Ecological Footprint - Fewer automobiles, more active transportation, and productive greenspace help reduce the

.... Transportation Spending - Infrastructure spending is focused on a streetcar network and development of bicycle lanes and sidewalks on every street.

Energy Consumption - Electrically operated streetcar and LRT system allow for a



# Street Typologies

(SI) Streetcar/Automobile



#### (S2) Streetcar/Pedestrian



(S3) Streetcar/Retail Corridor (La Rambla)



#### GI) Manchester Bluff







#### (G3) Neighbourhood Greenway



#### (RI) Collector Street



#### (R2) Neighbourhood Street







(R3) Neighbourhood Street (Woonerf)



(R4) Commercial Boulevard (La Rambla)



(R5) Retail Pedestrian (La Rambla)



(R6) Neighbourhood Pedestrian (Woonerf)







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