

Table A-1 Characteristics of Candidate Transit Vehicle Technologies

Item	Std Bus	Mall Bus	Artic Bus	Bi-Artic	Stream	Civis	"GLT"	LRT1	LRT2	DMU1	DMU2	DMU3
See Figure Nos.	1	2	3	4	5	6	7 & 8	9 & 10B	11 & 12	13 & 14	15-20	21-23
Supplier(s)	Many	Neoplan	Many	Volvo	Breda	Matra	2 [a]	Many	Many	3 [b]	Several	2 [c]
Dimensions:												
- Length	40'	40'	60'	80'	40', 60'	~60', 80'	83.3'	~60'-155'	80'-95'	85'	110'-200'	80'-125'
- Width	8.5'	8.5'	8.5'	8.5'	8.2'	8.4'	8.2'	~7.5'-8.7'	8.7'-9.5'	10.5'	9.2'-10.2'	8.7'-9.8'
- Height	10'	9.5'	10'	10'	10'	~10.5'	10.6'	~11'-11.5'	~11.5'-12'	13.1'	12'-12.7'	11'-12.8'
Low Floor:												
- % of Length	70-100%	100%	80-100%	None [d]	100%	100%	100%	70-100%	70-100%	None [d]	60-70%	60-70%
- Entry Height	14.5"	14.5"	14.5"	~36"	14.5"	~13"	~14"	~14"	~14"	51"	24"	~14-22"
Accommodations:												
- Air Conditioning	Yes	Yes	Yes	Yes	??	Yes	No?	Yes & No	Yes	Yes	Yes & No	Yes & No
- Seats/Vehicle	~45	~20	~65	~85	~45 & 65	~45 & 65	48	~25-125	~60-75	~90-110	~90-100	~75-100
- Psgrs/Vehicle [f]	65	45	110	145	65 & 110	110 & 145	150	110-285	~145-175	~165-175	~165-175	~125-175
- Psgrs/Train [g]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	220-285	290-350	330-350	330-350	250-350
Propulsion Alternatives:												
- Diesel, Diesel-Electric	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes
- Battery Electric [i]	No	Yes	No	No	Yes	Yes	Yes	Maybe	Maybe	No	No	No
- Straight Electric [m]	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No
Operating Capability:												
- Max Speed (mph)	65	~45	65	45?	~45	~45	~45	~45	55-65	80-100	60-100	50-60
- Max Grade (%):												
- Technical	12%+	12%+	12%+	~9-10%?	12%+?	13%	13%	8%	7%	1%-3%	1%-3%	6&
- Practical for Ops [i]	5%	5%	5%	5%	5%	5%	5%	5%	4%	1%	1%	2%
- Miin Curve (Radius):												
- Technical	35'-42'	35'	40'	~40'?	~40'?	40'	40'	50'-60'	82'	250'	328'	85'-265'
- Practical for Ops	45'	40'	45'	45'?	45'?	45'	45'	65' [j]	85'	500'	500' [j]	[k]
- Directionality [h]	SE	SE	SE	SE	SE	SE	SE [n]	SE or DE	DE	DE	DE	DE
FRA Structure	n/a	n/a	n/a	n/a	n/a	n/a	n/a	No	No	Yes	No	No

[a] Bombardier *Tram on Tires*, Lohr Industrie *Translohr*. Data for *Tram on Tires*, but *Translohr* very similar. [b] Siemens *RegioSprinter* (in service), Adtranz *GTW 2/6* (ordered), Bombardier *Tram Train* (concept only). [c] Bombardier & Nippon Sharyo, concepts offered but none built to date. [d] High platforms at same height as vehicle floor used to provide level boarding. [e] Step loading, not set up for level boarding. [f] Standees are calculated at approximately 3 sq ft per person in the interior area not used for seats. [g] Total, seated & standing, 2-car trains where applicable. [h] SE - one operating cab, doors on one side, uni-directional; DE - two operating cabs, doors on both sides, bi-directional. [i] May be exceeded for short stretches of +/- 1-2 blocks or less. [j] For railroad-type cars, allows 25 mph speed with 3 inches of superelevation. [k] Depends on capability of vehicle selected. [l] For limited-range movements, usually in yards and around obstructions. [m] Power from overhead contact system (OCS) except Stream. [n] *Translohr* intends to offer both SE and DE versions of its guided bus, but the DE version - unlike the SE vehicle - would not be intended for operation both on and off the guideway.

Appendix A

Candidate Vehicle Illustrations



Figure A-1: 40' Low Floor Bus
(Fuel Cell Propulsion)



Figure A-2: New Low Floor Mall Shuttle
(16th Street Mall, Denver)



Figure A-3: Tri-Met Articulated Bus



Figure A-4: Curitiba Bi-Articulated Bus



Figure A-5: Stream, Non-articulated Bus



Figure A-6: Civis

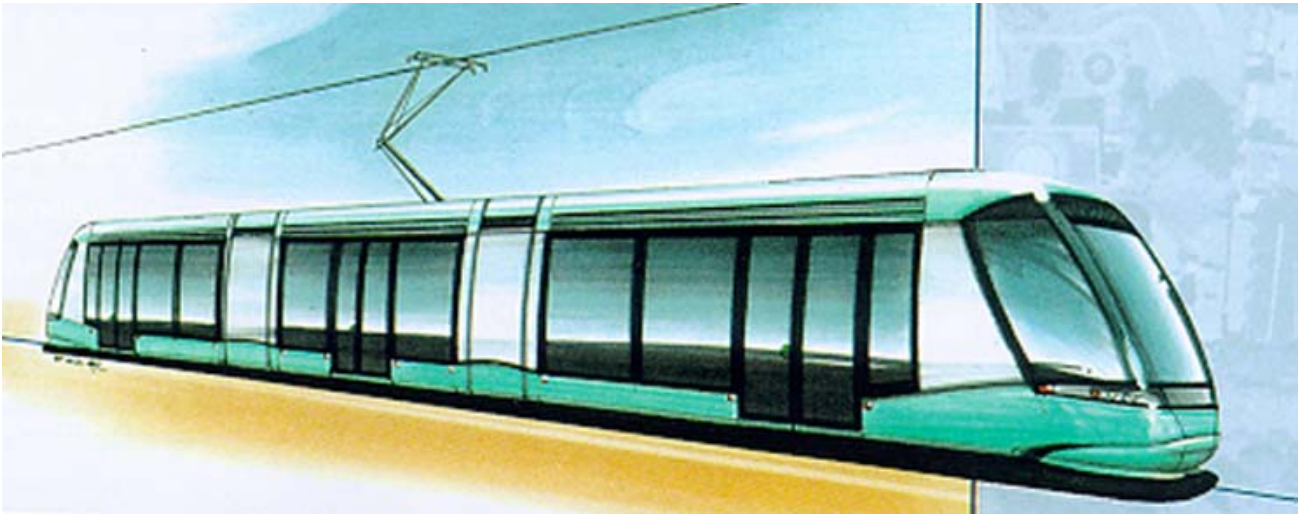


Figure A-7: Translohr



Figure A-8: Tram-on-Tires



Figure A-9: Sacramento LRT, 4-Car Train



Figure A-10: Astra Low Floor LRV for City-type Service



Figure A-11: Combino LRV for City-type Service



Figure A-12: Portland Low Floor LRV for Regional Service



Figure A-13: Portland Low Floor LRV



Figure A-14: Nippon Sharyo Type 1 DMU



Figure A-15: Bombardier Type 1 DMU



Figure A-16: Dallas RDC (Type 1 DMU)



Figure A-17: Coradia Type 2 DMU



Figure A-18: Flexliner Type 2 DMU



Figure A-19: Regio-Shuttle Type 2 DMU



Figure A-20: Talent Type 2 DMU



Figure A-21: New Jersey DLRV
(Type 3 DMU)



Figure A-22: RegioSprinter DLRV (Type 3 DMU)



Figure A-23: Tram Train (Potential Type 3 DMU)