

Durham
Chapel Hill
Carrboro



metropolitan
Planning Organization

APPENDIX B

FIXED GUIDEWAY/HIGH CAPACITY TRANSIT PROJECTS



APPENDIX B -- FIXED GUIDEWAY/HIGH CAPACITY TRANSIT PROJECTS

BACKGROUND AND TOTAL COSTS

This section presents the fixed guideway plan for the recommended 2030 LRTP. Fixed guideway refers to rail, bus rapid transit, and other types of transit service that operate on permanent routes that are often grade separated. In the first table on page B-3 of this appendix, "Fixed Guideway/High Capacity Transit," two (2) rail/fixed-guideway and two (2) high capacity transit systems are listed with relevant data. There are ten (10) listings because the rail project is divided into two projects, and then each project has an inbound and outbound component (i.e., two service directions for each route). The total costs for these projects is over \$1 billion – the rail and fixed guideway projects represent approximately 90% of these costs.

In addition to these fixed-guideway projects, the second table on page B-3 lists five projects to protect rail right-of-way, at a cost of \$13 ½ million.

KEY INFORMATION

In the first table, each row in this listing is a separate fixed-guideway or high capacity project. The key information for each project is presented by columns, and includes the following:

- No. – This number facilitates the identification of projects in the long-range plan and does not represent any type of project priority. There are 10 fixed guideway/high capacity transit projects.
- Route Name – This name identifies the service corridor, or major facility that is being served. IB is inbound, and OB is outbound.
- Transit Agency – TTA will operate Phase I projects, but Phase II projects are not far enough along in the development process to definitely determine the operator. CHT – Chapel Hill Transit will operate the high capacity service in Chapel Hill and Carrboro.
- Peak Headway – This number denotes the number of minutes between service vehicles, e.g., rail car or buses, on that route during peak travel times, i.e., morning and afternoon "rush hour." TTA rail service will begin in 2008 with 15-and 30-minute peak and off-peak headways, respectively, and will reduce those headways to 10 and 20 minutes in 2020.
- Off-Peak Headway – This number denotes the number of minutes between service vehicles, e.g., rail car or buses, on that route outside of peak travel times, i.e., morning and afternoon "rush hour."

HOW ARE TRANSIT COSTS COMPUTED

Various feasibility and/or major investment studies have been conducted for all the proposed fixed guideway projects. The cost estimates from these studies are used for the 2030 LRTP.

EXEMPT PROJECTS

Components of the fixed-guideway projects are deemed exempt from air quality conformity determination according to Title 40, Code of Federal Regulations (CFR), PART 93.126 and PART 93.127. The following project components are exempt: mass transit operating assistance; support equipment, vehicles and structures; and, rail cars that replace existing vehicles or for minor fleet expansions. The purchase of rolling stock (e.g., rail cars) for new service is not exempt.

The five rail protection projects are to purchase or reserve existing right-of-way, the use for which has not been determined. There are not any projects in the 2030 LRTP or TIP to construct a facility on the right-of-way, and thus the rail protection projects have a long-term development horizon. The projects are exempt under Title 40, Code of Federal Regulations (CFR), PART 93.126, because they are “specific activities which do not involve or lead directly to construction.”

The most important implication of this exemption is that components of the projects may proceed toward implementation in the absence of a conforming transportation plan or Transportation Improvement Program (TIP).

**DCHC MPO 2030 Long-Range Transportation Plan
Fixed Guideway and High Capacity Transit Projects**

Fixed Guideway / High Capacity Transit									
No.	Service Type	Route Name (Description)	Transit Agency	Peak Headway	off peak Headway	Year	O&M Costs	Capital Costs	Total Costs
1	Rail	Ninth Street -> Government Center	TTA Rail Phase 1	15/10	30/20	'08/'20	\$158,530,000	\$393,840,000	\$552,370,000
2	Rail	Government Center -> Ninth Street	TTA Rail Phase 1	15/10	30/20	'08/'20			
3	Rail	Duke Medical -> Ninth Street	TTA Rail Phase 1	10	20	2020			
4	Rail	Ninth Street -> Duke Medical	TTA Rail Phase 1	10	20	2020			
5	Fixed guideway	Duke/9th ST-> UNC/Horace Williams (15-501)	Undetermined	10	20	2020	\$101,239,898	\$299,299,830	\$400,539,728
6	Fixed guideway	UNC/Horace Williams -> Duke/9th Street (15-501)	Undetermined	10	20	2020			
7	High capacity	I-40 via 15-501->Carrboro Plaza IB	CHT	10	20	2030	\$35,331,642	\$66,926,000	\$102,257,642
8	High capacity	Carrboro Plaza -> I-40 via 15-501 OB	CHT	10	20	2030			
9	High capacity	Eubanks -> Southern Village IB	CHT	10	20	2030			
10	High capacity	Eubanks -> Southern Village OB	CHT	10	20	2030			
Totals							\$295,101,540	\$760,065,830	\$1,055,167,370

Rail Corridor Protection			
No.	Service Type	Route Name (Description)	Year
1	Rail protection	NC 55/Apex	2025
2	Rail protection	Durham - Treyburn	2010
3	Rail protection	Durham - Hillsborough/Mebane	2025
4	Rail protection	Chapel Hill (Eubanks) - Hillsborough	2030
5	Rail protection	Durham Beltline	2010
Total Costs =			\$13,575,623