



Regional Rail Planning

Round Rock City Council

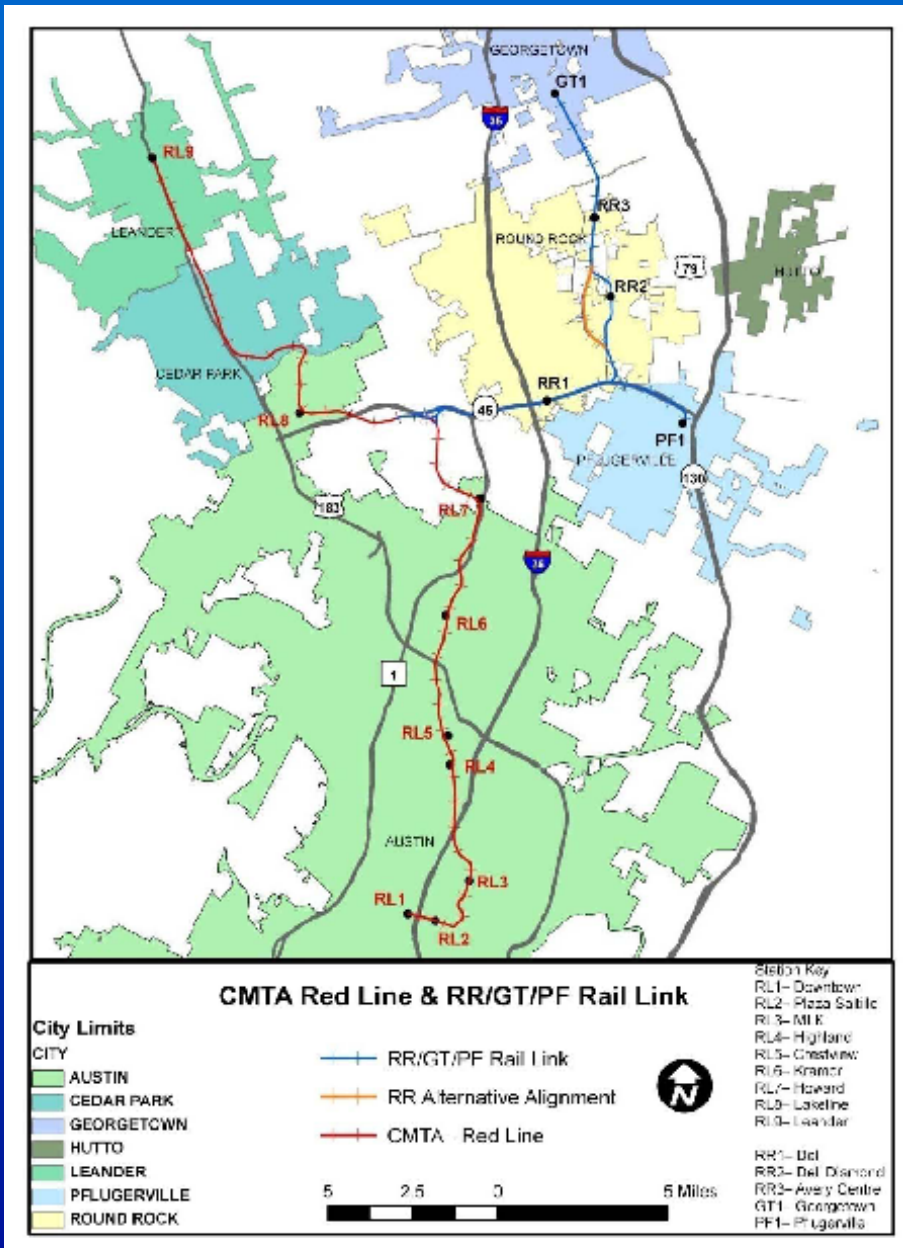
May 13, 2010



Regional Rail Planning

- System Schematic
- System Description
- Feasibility Study
- Potential Partners
- Estimated Demand
- Cost – Capital and Operating
- Funding Sources – Federal, State and Local
- Challenges
- Recommendations
- Study Participants

Rail Link System Schematic





Rail Link System Description

- **Regional Commuter Rail**
 - 18.3 mile route
 - Primarily double track
 - Connects to the Capital Metro MetroRail Red Line
 - Links Round Rock, Georgetown and Pflugerville with Austin
 - Peak hour service
- **Right-of-Way**
 - SH 45 median
 - Abandoned Missouri/Kansas/Texas rail corridor



Rail Link System Description

- **Potential Stations**
 - Georgetown Inner Loop and MKT
 - County Road 112 and MKT (Avery Centre)
 - US 79 and Harrell Parkway (Dell Diamond)
 - Pflugerville (Stone Hill Center)
 - SH 45 between IH 35 and Greenlawn Blvd (Dell HQ)
- **Alternatives Considered**
 - SH 45 median and MKT, but deviate to Dell Diamond
 - SH 45 median and MKT



Feasibility Study

- **The City and the Central Texas Regional Mobility Authority funded a study to review the feasibility of commuter rail serving Williamson and Travis Counties**
- **Study Scope**
 - Demand Analysis and Ridership Estimate
 - Congestion Analysis
 - Capital Program and Rail Vehicles
 - Operations Analysis and Governance
 - Mobility, Environmental, and Passenger Benefits
 - Financial Assessment
 - Environmental Fatal Flaw Analysis
 - Land Use Plans and Policies
 - TOD Market Assessment
 - FTA New/Small Starts Evaluation Criteria
 - CAMPO Transportation Investment Decision Tree Evaluation



Potential Partners

- Project development could require agreements between numerous public agencies including:
 - TxDOT
 - Williamson and Travis Counties
 - Round Rock, Pflugerville, Georgetown, Austin
 - Capital Metropolitan Transportation Authority
 - Central Texas Regional Mobility Authority
- Role of Capital Metro
 - Partner
 - Operator



CTRMA





Conservative Estimated Demand

<u>Year</u>	<u>Demand</u>	<u>Trips</u>
2007	1,161	2,322
2030	2,962	5,924

- **Assumptions**

- Strong competition from cars, express bus and bus rapid transit
- Low capture rate estimates for Pflugerville residents and UT students
- Transfer penalty for 3-seat trips



Capital Cost

- **Capital cost estimated at \$340 million or \$18.6 million per mile**
 - Double track and single track
 - Grade separated crossings along SH 45 and over US 79
 - Crossing Signals
 - Railroad signalization
 - Stations
 - Right-of-way
 - Vehicle storage and light maintenance facility
 - Double tracking Red Line
 - Rail vehicles
 - Design and engineering



Operating Cost Scenarios*

- Operating cost is projected to be up to \$ 7.3 million annually depending on level of service

<u>Headway at tie in to Red Line</u>	<u>CMTA Vehicle</u>	<u>Extended CMTA Vehicle</u>	<u>Double Decker Vehicle</u>
15	\$ 6.8 M	\$ 6.8 M	\$7.3 M
20	\$ 6.8 M	\$ 6.8 M	\$7.3 M
30	\$ 5.5 M	\$ 5.5 M	\$ 5.9 M

* 2007 dollars

- A fourth scenario was evaluated, but the scenario proposed operating two physically separated rail systems with a passenger transfer at the Howard Lane Station



Federal Funding Sources

- **FTA New/Small Starts Discretionary**
 - Annual Appropriations
 - New Transportation Bill
- **FTA Section 5307 Transit Formula**
- **Surface Transportation Program / Capital Area Metropolitan Planning Organization**
- **Congestions Mitigation and Air Quality (non-attainment required)**
- **Transportation Infrastructure Finance and Innovation Act Loans**



State Funding Sources

- **Non-dedicated funds from the State Highway Fund**
- **The Texas Mobility Fund**
- **State Infrastructure Bank**
- **Texas Rail Relocation and Improvement Fund**
- **Transportation Development Credits**



Local Funding Sources

- **General Fund**
- **General Obligation Bonds**
- **Economic Development Corporation**
- **Excess Toll Revenue**
- **Local Option Tax/Fee (future)**
- **Donation of Property or Lease Value**
- **Tax Increment Finance (TIF) Districts**
- **Special Purpose Districts**
 - **Public Improvement Districts**
 - **Management Districts**



Challenge

Demand Vs. Capacity*

- **The Red Line was not designed to accommodate the volume of passengers originating in Williamson and northeast Travis Counties**

	<u>CMTA Vehicle</u>	<u>Extended CMTA Vehicle</u>	<u>Double Decker Vehicle</u>
Capacity	1,747	2,208	9,900
Demand	2,962	2,962	2,962
Demand Met	60%	75%	335%

* 20-minute headways at Red Line tie-in



Challenge

Demand Vs. Ridership

- **Options**
 - **Double Track Red Line**
 - **Add additional rail cars per train set; longer stations**
 - **Plan for higher capacity vehicles in the future**



Challenge

Capital and Operating Cost

- **Consumes a significant amount of future bonding capacity**
 - Would require the passage of local referendums in support of funding the project
- **Funding operations is potentially a fatal flaw**
 - Can be resolved by implementing a new source of locally based tax and/or fee revenues
 - Requires action by state legislators and most likely a local referendum



Recommendations

- **Alternatives Analysis**
 - Partner with municipalities and other entities
 - Leverage funding with partners and Federal Government
- Support Local option tax and/or fee revenue legislation



Study Participants

- City of Round Rock
 - Public Works, Finance, Planning, Parks and Recreation
 - The Goodman Corporation
 - Huggins Seiler and Associates
 - HDR
- Central Texas Regional Mobility Authority
 - HNTB
- Capital Metropolitan Transportation Authority
- Texas Department of Transportation
 - Texas Turnpike Authority
 - PBS&J
- Williamson County
- City of Georgetown
- City of Pflugerville
- Capital Area Metropolitan Planning Organization



Final Report

www.roundrocktexas.gov/commuterrail



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