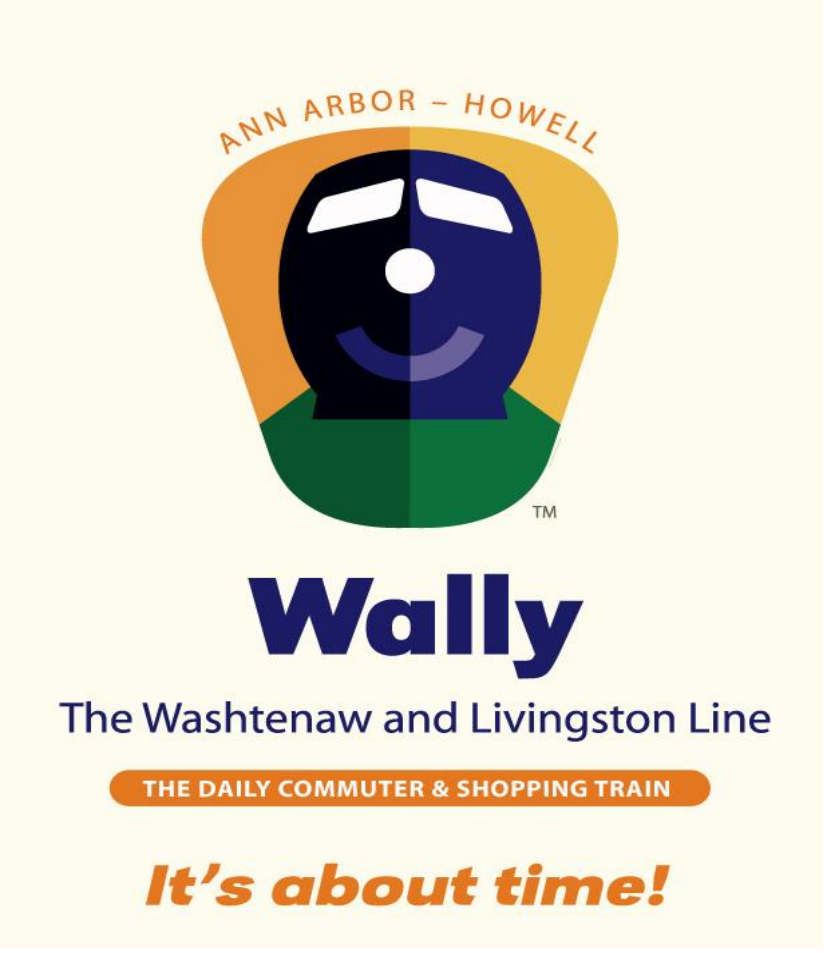

WALLY North South
Commuter Rail Service

Business Plan

Corridor Oversight Committee

Washtenaw Livingston Counties
Michigan

September, 2008

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Executive Summary

The North South Corridor Commuter Rail Project will upgrade an existing freight line for commuter rail passenger service. Passenger service will be provided between Ann Arbor Michigan in Washtenaw County and Howell Michigan in Livingston County. The rail service will extend 27 miles and ultimately have seven stations.

The project is nearing initiation of the design and organizational phase. Design of railroad track and signals has been completed, rolling stock has been procured, and estimates have been made on the railroad rehabilitation, signal work and stations. A federal CMAQ grant for capital costs has been secured for FY 2009.

The yet to be formed Authority will manage the project, in cooperation with the Michigan Department of Transportation (MDOT), the City of Ann Arbor, Northfield Township, Hamburg Township, Genoa Township, the City of Howell, Counties of Washtenaw and Livingston, Washtenaw Area Transportation Systems (WATS), Southeast Michigan Council of Governments (SEMOG) and other members with a direct interest in the commuter rail project. The North South rail committee has played a key role in directing project activities to date.

The Business Plan details the key activities and functions that the AUTHORITY will take to ensure a viable commuter rail service. The plan describes the relationship and functioning of key operational, financial, and management aspects for the Wally North South Corridor Commuter Rail service.

The purpose of the Business Plan and assessment is to: 1) compile various project reports and information together into one comprehensive document, 2) serve as a guide to the Authority and other interested parties and the general public for the management of the project, and 3) review aspects of the project that have given rise to concerns.

General. The project will provide passenger commuter rail service adjacent to a congested freeway linking Livingston and Washtenaw Counties. Financing and funding issues continue to exist, but are manageable and are being addressed. The commuter rail service will be an asset to both communities and a complement to community development and revitalization efforts.

Management. A project of this magnitude requires focused management. The Business Plan includes recommendations for to the Authority's management structure and the addition of the Authority staff dedicated to the project.

Ridership & Revenue. Ridership is somewhat difficult to predict on a new transit system. The ridership forecasts appear reasonable and attainable, and growth rates are consistent with population growth forecasts for Washtenaw and Livingston Counties. It will take an aggressive, effective marketing program for the new commuter rail service to realize its potential market share.

Construction Budget. Needed construction dollars have been identified for track repair and station expansion and have resulted in the need for additional funds. All estimates are in and the need for contingency has been increased from the original plan for the first year; however, there are still risks associated with the construction of stations.

Financing Ongoing Operations. Contribution sources have been identified and some have made commitments to the projects additional funding sources are needed to make the project operational. However, the University of Michigan's commitment and the ridership subsidy for its employees has given the project a significant boost in fare box revenue. Washtenaw County is also working to identify ongoing operating sources for this service as part of a larger transit improvement plan.

MDOT Funding. The project is currently eligible for approximately $375,000 in capital and approximately $1,400,000 for operating funding. A unified local and state commitment to the commuter rail project will be beneficial to the effort to secure federal funds needed to complete the capital improvements required for 60 mph service.

Marketing and Other Pre-Operation Activities. The North South Rail Marketing Committee and identified some strategies for a roll out of the service including branding the service WALLY – the Washtenaw and Livingston Line. The RL Banks Consulting firm has prepared a Commuter Rail Service "Start Up" Plan that outlines all the tasks to be addressed for a successful start-up of revenue operations.

Section 1: Introduction and Purpose

This is a business plan detailing the key activities and functions that the Authority that will operate WALLY will need to take to ensure a viable commuter rail service. This plan describes the relationship and functioning of key operational, financial, and management aspects for Wally North South Commuter Rail service. Much of the information contained in this plan is derived from analysis and studies conducted by RL Banks & Associates for this service.

1.1 Business Plan Organization

This plan covers key aspects of the North South Commuter Rail service, including:

Management Structure
Railroad Operating Plan and Operating Budget
Station Development
Track, Signal and Grade Crossing
Ridership Estimates
Finance and Administration
Customer Service and Bus Interface
Development Opportunities and Risks
Ann Arbor Rail Road Extension

1.2 About the North South Corridor Commuter Rail Service

WALLY, the North South Commuter Rail Project provides for upgrading an existing Great Lakes Central single-track freight line for commuter rail service. When passenger operations begin, service will be provided between Ann Arbor, Michigan and Howell, Michigan.

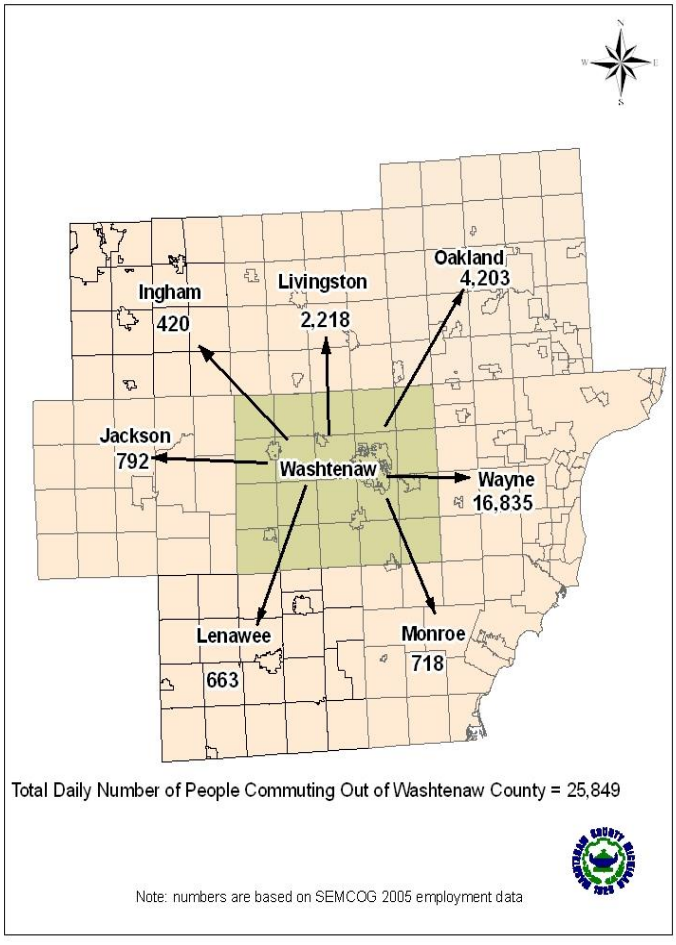
The rail service will extend 27 miles (single track) from a Downtown Station in Howell to approximately Barton Road in the City of Ann Arbor. Ultimately, seven stations are planned. A mid-day layover siding is recommended and a future passing siding should be added, and one layover facility should be constructed that is nearer to the service for vehicle storage and maintenance.

Great Lakes Central Railroad has acquired 50 used passenger rail vehicles for the project from Metra in Chicago, and is working to obtain the necessary locomotives to operate the rail services. Contract negotiations have yet to be completed for the service.

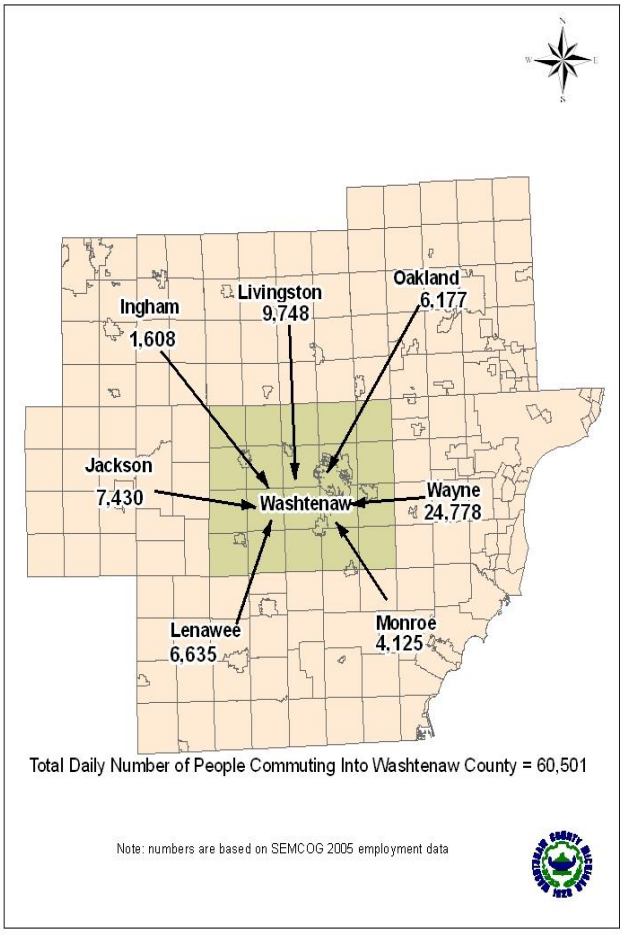
Ridership data was developed from a survey conducted by the University of Michigan and several of the local chambers of commerce. This data indicate over 1300 riders for the service; a budget has been prepared using 1300 initial riders excluding any special event riders. Potential ridership is significant given the current travel patterns. See Figure 1.1

Figure 1.1

Daily Number of People Commuting Out of Washtenaw County



Daily Number of People Commuting Into Washtenaw County

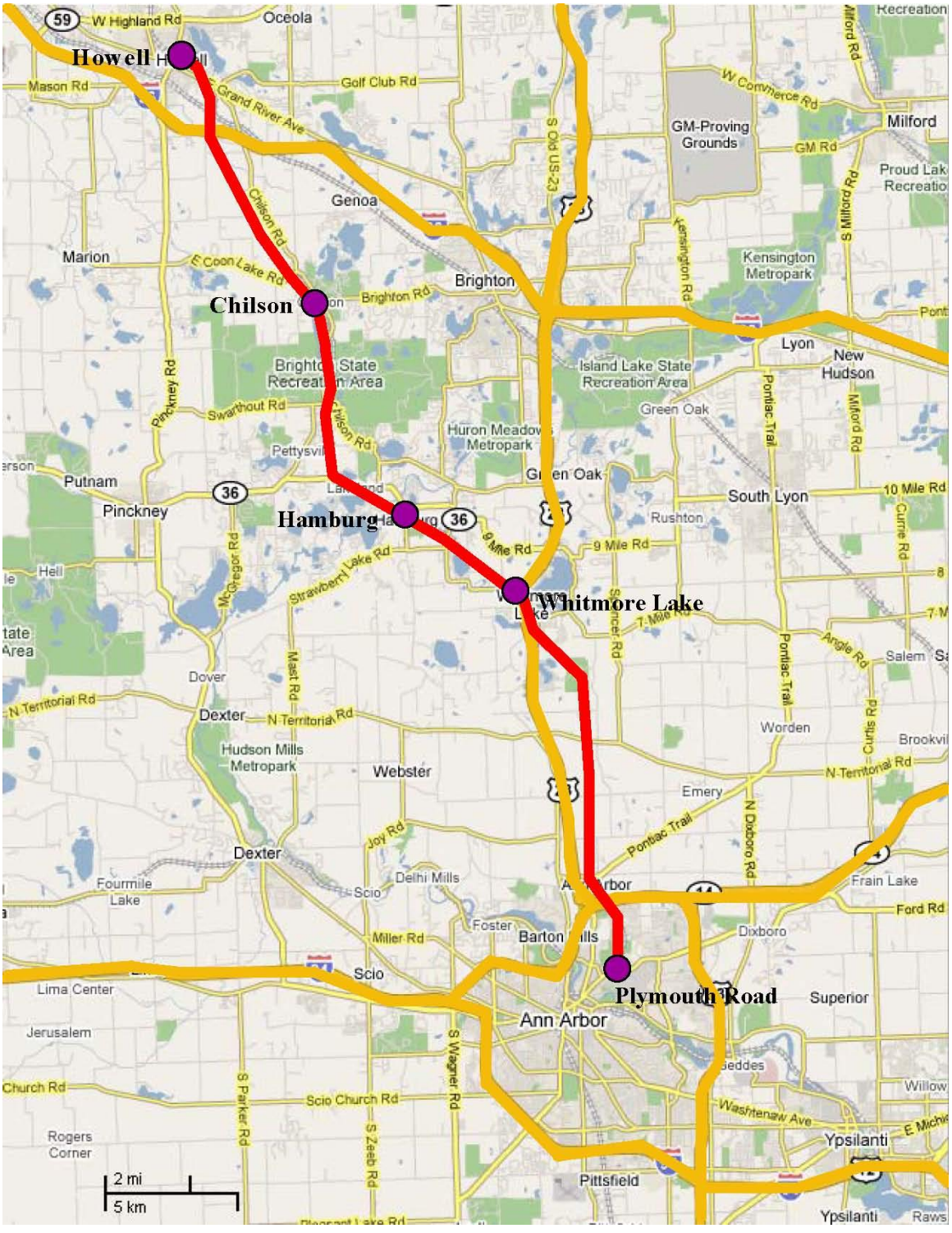


Four train sets would initially provide four morning in bound and four evening outbound trips each weekday. Weekend service will not be provided initially; however, service will be expanded to meet demand and some special event service is anticipated for University of Michigan sporting events and local fairs and festivals. Service will be supplemented with connecting bus service (to be provided by AATA and LETS under contract) to provide direct bus links to major employers and downtown Ann Arbor. See figure 1.2.

Travel time from Howell to Barton Rd. is approximately 60 minutes. Top operating speed will be 60 MPH. The schedules will not be finalized until actual run data can be compiled, after the completion of the track and signal work.

Cars have been acquired from Metra in Chicago and are being rehabilitated in 2008 and 2009 by the Great Lakes Central Railroad. Minor modifications are needed to meet ADA requirements. These modifications are included in the budget.

Figure 1.2
Wally North South Rail Service



1.3 Prior Project Development Work

Southeast Michigan has been active in the planning and development of commuter rail service for over ten years. The WALLY effort was initiated in June 2006. This section briefly documents the key studies and milestones associated with the North-South WALLY Commuter Rail Service.

Creation	In response to congestion in the U.S. 23 corridor and no apparent funding for highway improvement, the coalition was created. The coalition includes local and county governments, regional transportation agencies, elected officials, business, and community organizations to improve mobility and safety on U.S. 23.
Initial Focus	The Coalition initially focused on expanding highway capacity on US-23.
June 2006 (First Impetus)	A major impetus for examining alternatives came from the Mayor of Ann Arbor, who, in June of 2006, released a transportation vision for the City that proposed a model for mobility in the 21st century.
Second Impetus	A second major impetus to the creation of the WALLY project was early and enthusiastic support for regional commuter rail service by Great Lakes Central Railroad (GLC), which provides freight services on the state-owned line linking the City of Howell to Ann Arbor at Barton Road. GLC expressed a willingness to provide commuter rail service on this rail corridor and was instrumental, along with the City of Ann Arbor, in generating regional interest in a commuter rail service to reduce congestion and enhance safety on U.S. 23.
Focus by MDOT scheduled construction 2007	Spurred on by an MDOT construction project on this corridor scheduled for 2007, the US 23 Coalition focused on establishing commuter rail service between Ann Arbor and Howell, as a means to mitigate expected long delays during construction. The Coalition established committees to work on issues such as, station design and locations, infrastructure needs, governance, financing, train schedules, environmental clearance, marketing, and public education. The initial goal was to have commuter rail service operating by the commencement of the US 23-construction project in the 2007.
Development of a Comprehensive Plan	These committees developed a comprehensive plan that would provide commuter rail service between the city of Howell and downtown Ann Arbor.

Initial Service	Four train sets would initially provide morning inbound and evening return trips each weekday between downtown Howell and Barton Road in Ann Arbor. The Ann Arbor Transportation Authority (AATA) and Livingston Essential Transportation Services (LETS) agreed to provide passenger connections at the two train termini.
Extension of Service	Service would extend to downtown Ann Arbor and to the University South Campus after necessary agreements are made with Ann Arbor Railroad (AARR) and any required capital improvements are identified and completed on the AARR owned rail line. Train service would also be available on weekends for special events such as University of Michigan football games and the Ann Arbor Art Fair. As demand grew, WALLY would expand service on weekdays and weekends.
Financial Commitments by key stakeholders	This proposal received widespread community support, resulting in financial commitments by key stakeholders. MDOT committed $375,000 for capital improvements to the state-owned track and up to $1.4 million in operating funds. (The amount in operating assistance received by WALLY to be determined by identifying operating costs eligible for reimbursement under the state transit operating assistance formula program.) The Michigan Economic Development Authority committed $220,000 based on $20,000 per job created. GLC committed $200,000 for equipment upgrades. The Coalition secured three-year financial commitments from the Ann Arbor Downtown Development Authority (DDA) ($250,000), Washtenaw County ($150,000), Ann Arbor Transportation Authority ($50,000) and the Northfield DDA ($10,000). The University of Michigan committed $25,000 for two years and based on a survey of its employees, committed to subsidizing employee ridership for three years ($1.7 million estimated in year one). The Coalition continues to pursue additional funding for WALLY from local communities and businesses expected to benefit from the initiation of commuter rail service.
Submittal of applications for Federal grant	The Coalition also submitted federal grant applications to the Federal Highway Administration ($1 million from the Transportation, Community, and System Preservation Program (TCSP) funding denied), to the Southeastern Michigan Council of Governments (SEMCOG) and to MDOT ($500,000 per year in Congestion Mitigation/Air Quality (CMAQ) request pending on creation of a managing authority.)

Estimated Ridership revenues	Based on ridership surveys conducted by the University of Michigan, local chambers of commerce, and other community groups, the Coalition has estimated ridership revenues to be $2.45 million (50% of operating expenses) in the first year of operation. If these ridership estimates prove to be accurate, the percentage of fair box revenues supporting this service will be among the highest in the nation.
Coalition's support for launching service with 12-18 months	While the Coalition was unable to meet its objective of providing commuter rail service in 2007, continued strong local, state, and federal support points to launching commuter rail service within the next 12 to 18 months. Letters of support have been received from: Senator Debbie Stabenow Congressmand John Dingell Congressman Joe Knollenberg Congressman Mike Rogers Congressman Tim Walberg Michigan Senate Resolution State Senator Liz Brater State Senator Valde Garcia State of Michigan House of Representatives Resolution Representative Pam Byrnes Representative Joe Hune Representative Chris Ward MDOT Intermodal Policy Division Southeast Michigan Council of Governments (SEMCOG) Transportation Riders United (TRU) Washtenaw Area Transportation Study (WATS) Ann Arbor Transportation Authority (AATA) Washtenaw County Ann Arbor Downtown Development Authority City of Ann Arbor City of Saline Northfield Township Lodi Township Dexter Township Charter Township of Superior City of Howell Bright Area Chamber of Commerce

Section 2: Management Structure

2.1 Management Structure – Current and Proposed

The Authority will be a Michigan Public Act 196 entity The task of actually implementing and operating a commuter rail system is a considerable venture of the Authority. It has not been decided if the Authority will be an existing entity or if it will initially operate under an existing Act 51 agency. Washtenaw County is pursuing the formation of an Public Act 196 Authority.

RLBA suggests the following organizational structure if the organization is a stand alone operation:

- Executive Director
- Manager of Operations
  - Train Operations
  - Bus Operations
- Manager of Finance and Administration
  - Ticketing
  - Accounting
  - Information Technology
- Manager of Planning and Programming
  - Capital Projects
  - Government Relations
  - Public Affairs
- Manager of Customer Service and Marketing
  - Marketing and Advertising
  - Special Trains, Events and Group Travel
  - Public Education and Surveys

These are functions, not necessarily staff positions. Indeed, RLBA recommends minimum staff (to keep expenses reasonable) consistent with effective discharge of the functions. Another option is to have an existing entity act as the Authority for the service.

In this organizational structure, the Executive Director would report to the Authority Board of Directors. Most of the other tasks in the operation of Wally commuter rail service would be divided among four functional areas with a manager of each (or manager(s) of more than one functional area) reporting to the Executive Director.

The North South Rail Committee (NSRC) will play a key role in consulting the activities of both the Authority staff and the rail authority. The NSRC membership will be comprised mostly of members with a direct interest in the commuter rail project. The future the Authority activities will include operating and maintaining the North South Corridor as well as the

development of new transit corridors. These efforts will be coordinated with the MDOT. The long term vision and goals of the ride share activities are also being reviewed and the task force will prepare an organization to support these efforts. The task members include:

Terri Blackmore-WATS
Doug Britz-LETS
Mike Cicchella-Chairman NSRC
Shea Charles – City of Howell
Louis Ferris-President Great Lake Central Railroad
Dawn Gabay-AATA
John Hieftje-Mayor of the City of Ann Arbor
Jeff Irwin-Chairman Washtenaw County Board of Commissioners
Tim Hoeffner-MDOT
Carmine Palombo-SEMOG
Susan Pollay-Ann Arbor Downtown Development Authority
Bill Rogers – Chairman Livingston County Board of Commissioners

The Authority's budget for commuter rail activities currently represents 90% of the total projected the Authority budget.

2.2 Analysis and Action Items

The following are Action Items:

The Authority will be key for the development and implementation of the regional commuter rail operations. The following actions were identified by RL Banks & Associates for implementation of the service:

- Establishment of an authority to manage the service
- Formation of this authority in time to arrange staffing and training
- Execution of operating and access agreement with the GLCRR
- Execution of agreement with CSX regarding priority dispatch through the Ann Pere diamond
- Execution of an agreement with Ann Arbor Railroad prior to use of that railroad's right of way
- Decision regarding, and implementation of, fare system

Section 3: Operations and Maintenance Plan

3.1 Operating Plan Summary

The rail route is 26.9 miles in length one way, between Howell and a station at Plymouth Road in Ann Arbor. An extension of another 2.86 miles between the Plymouth Road Station and a station near the University of Michigan stadium is a possibility. Four train sets initially would provide four morning and four evening trips each weekday. Trains will be operated in push-pull fashion. The passenger coaches will be pushed by a locomotive, but controlled by a cab car on the southbound move and pulled by the locomotive on northbound movement, eliminating the need to change the position of the locomotive on opposite direction trips. This is a conventional and efficient practice, employed nationwide.

RL Banks & Associated has produced an Railroad Operations Plan and Operating Budget for the North South Corridor commuter rail service, which was prepared in June 2008. This plan establishes the basic framework for the operation of the commuter rail service.

The Plan lists several Service Objectives related to the goal of delivering safe, reliable, cost effective, and efficient public transportation between communities in Livingston County and the City of Ann Arbor. The principle objectives of the Authority commuter rail system are to:

- Provide commuters an easy, safe, reliable, and comfortable trip to and from work
- Facilitate the safe, cost effective, and efficient movement of people within the project corridor
- Provide efficient, high-capacity transit service in the project corridor
- Support regional plans and policies that call for the provision of a balanced transportation system
- Reduce the need for increased parking in Ann Arbor.

The purpose of the Operation Plan and Operating Budget is to establish the operations required for safe, efficient, and reliable service on the WALLY commuter rail system. This Plan is specifically intended to:

- Identify the system's service and operating characteristics
- Identify the system's operating schedule
- Identify equipment and infrastructure needs
- Identify the requirements for assuring service dependability and system availability.

The Plan is intended to serve as a frame of reference for any future design refinements and as a basis to continue to develop detailed operations practices.

3.2 Commuter Rail Program Summary

Stations and parking recommendations. Station locations under consideration include Howell, Chilson, Hamburg, Whitmore Lake, and Plymouth Road in Ann Arbor. Also under consideration is a possible extension to the University of Michigan stadium with a potential downtown Ann Arbor stop. Stations are described in the next section of this report and the extension is addressed later.

A proof of fare system for the Wally service should be coordinated with that of AATA and LETS; if possible, as such systems have been adopted in almost all recent commuter rail implementations. It is recommended that ticket vending machines (TVM) located at each station accept credit cards. No cash sales would be made at stations or on trains. If desired, cash ticket sales could be offered at the Authority office and perhaps at selected retailers.

The Wally service would accommodate disabled passengers, as discussed in following sections concerning stations and equipment.

Train Speed and Travel Time. The proposed Wally operating plan is based upon the concept that the service must be both convenient and automobile-competitive in terms of transit time. In order to do so, a maximum operating speed of 60 mph is prescribed on GLC track. There is one curve which will require reduced speed as will the CSX crossing at Ann Pere, which is south of the Lucy Road Park, near Howell. The Ann Pere crossing signal could be upgraded from an automatic (first come-first served) basis to one controlled by a dispatcher. The Wally Service should seek an agreement with CSX for commuter train priority at the crossing.

Experience indicates that allowing one minute of dwell time at stations is appropriate until actual experience dictates otherwise. If service is extended beyond Plymouth Road, that station probably would require a longer dwell time, two minutes initially, to accommodate the significant expected number of passengers loading/unloading at that point. A sample schedule is shown below.

Sample Train Schedule

Station	**Morning Inbound Trains**			
Howell	6:00 AM	6:30 AM	7:00 AM	7:30 AM
Chilson	6:09 AM	6:39 AM	7:09 AM	7:39 AM
Hamburg	6:20 AM	6:50 AM	7:20 AM	7:50 AM
Whitmore Lake	6:24 AM	6:54 AM	7:24 AM	7:54 AM
Ann Arbor Plymouth Rd	6:36 AM	7:06 AM	7:36 AM	8:06 AM
Ann Arbor downtown	6:44 AM	7:14 AM	7:44 AM	8:14 AM
Ann Arbor U of M Stadium	6:52 AM	7:22 AM	7:52 AM	8:22 AM

Station	Evening Outbound Trains			
Ann Arbor U of M Stadium	4:30 PM	5:00 PM	5:30 PM	6:00 PM
Ann Arbor downtown	4:37 PM	5:07 PM	5:37 PM	6:07 PM
Ann Arbor Plymouth Rd	4:45 PM	5:15 PM	5:45 PM	6:15 PM
Whitmore Lake	4:57 PM	5:27 PM	5:57 PM	6:27 PM
Hamburg	5:01 PM	5:31 PM	6:01 PM	6:31 PM
Chilson	5:12 PM	5:42 PM	6:12 PM	6:42 PM
Howell	5:22 PM	5:52 PM	6:22 PM	6:52 PM

GLC is willing to perform freight service at night in order to make tracks available to commuter rail trains during daytime. GLC notes that the freight interchange with AARR has been performed at night in the past without difficulty. AARR has expressed some concerns about that plan. If night freight service does not work out, RLBA believes freight service could be performed between morning and evening commuter trains based on the initial commuter schedule. Improvements needed at Osmer to support daytime freight operations are addressed below under infrastructure.

Train Crews. Crews would consist of two persons, a conductor and an engineer. Crews would report for duty in the morning at the night layover facility at Oak Grove. Each crew would move its trainset to the Howell station for boarding and departure at the scheduled time. Upon the completion of the inbound trip, each trainset would be pulled south of the Plymouth Road station onto AARR track. The trainsets would be coupled into a single train and moved as one to the daytime layover track to be built at Osmer. Crews would remain on board to Osmer and then be transported via highway to the Oak Grove reporting/rest facility, and according to GLC, "the train crews will be released upon tie up at mid-day for at least four hours in order to return for evening service." This would be in compliance with the Federal hours of service laws governing railroad operating employees.

Crews would report back on duty for evening service at the Oak Grove facility and be transported via highway to the daytime layover point. All four trainsets would be moved as one train to Plymouth Road and staged south of the station on AARR track. Each crew would uncouple its trainset and move it to the station for boarding and departure. Upon reaching Howell, each empty train would be moved individually to the Oak Grove layover facility where crews would go off duty. Trainsets would be cleaned and serviced as needed at night at Oak Grove.

On-board crew duties would include all aspects of passenger interface – inspecting fares, assisting passengers, handling doors and ADA access equipment, answering questions, walk-through collection of papers and trash after each run.

Infrastructure. RLBA inspected the corridor by means of a hi-rail trip hosted by GLC on May 2, 2008. Findings of that inspection are presented in RL Banks & Associates Report Task 2.3 Infrastructure requirements summarized below are based upon planned operations, discussions with GLC, observations made during the inspection and infrastructure analysis in RL Banks & Associates Report Task 2.3.

Based on one-way peak period service and night freight operations, no new sidings are needed for train meets. Expanding service or implementing two-way peak period service would create the need for sidings where one commuter train can pass another going in the opposite direction. Farther in the future, expanded service hours or changes in freight operations conceivably could cause concurrent freight and passenger operations with a resulting need for additional sidings or other infrastructure.

Although the existing Osmer siding would seem to be available for daytime commuter train storage based upon GLC-AARR interchange being conducted at night, it would be prudent to construct a new daytime commuter train storage siding at Osmer. This would leave the existing siding available for interchange and freight use. Extending the existing siding to accommodate 90-car trains could be done at the same time to improve freight efficiency and facilitate shared use.

Overnight Layover Facility. The proposed location of the overnight layover facility is Oak Grove siding, north of Howell. While earlier planning may have considered a "bare bones" approach based upon parking commuter trains overnight on the existing siding, RLBA believes that a proper layover yard should be constructed to facilitate cleaning, servicing, security and perhaps light maintenance. The layover yard/plan should provide for cleaning, servicing, an access road between tracks to facilitate cleaning and servicing, standby power, fencing, a building for crew reporting and rest facilities, and utilities.

Midday Storage Facility. After unloading passengers, each trainset will pull onto AARR trackage south of the Plymouth Road station. (RLBA understands that GLC and AARR have had preliminary discussions concerning this concept.) When all four trainsets are empty, they will be coupled together and the last inbound crew will move them together to the daytime layover track at Osmer (or Whitmore Lake if Osmer is not available) for day storage. Crew members could walk through and pickup trash there or at Plymouth Road. The first outbound crew would move all trainsets from Osmer to AARR track south of the Plymouth Road Station. Each trainset would be moved north to the station for boarding at the appropriate time.

Signal System. RLBA recommends that a signal system be installed on the trackage to be used by the Wally service. RLBA has made the same recommendation to its prior commuter rail clients, and almost all new services have been implemented on signaled trackage. Signal system alternatives and costs are discussed in RL Banks & Associates Report Task 2.3.

Operations. THE AUTHORITY will contract with an experienced operating firm for train operations and equipment maintenance. THE AUTHORITY is responsible for establishing service and fare policies, and will have oversight responsibility for the contractor. The GLCR will have responsibility for dispatching and train control. THE AUTHORITY and GLCR will have an operating agreement that details the provisions for commuter rail use of GLCR trackage.

3.3 Analysis and Action Items

Next Steps and Critical Path – Rail Operations

The next step with respect to commuter operations is to negotiate access and operating terms with GLC. In many new starts, particularly those involving larger railroads, these topics have been the subject of separate agreements because the host railroad often does not want to be the commuter service operator. In that model, the service sponsor negotiates an access agreement with the host railroad and then initiates a competitive procurement to select a commuter rail operator. The access agreement also opens the door for the commuter rail service sponsor to construct improvements such as stations on railroad property and to initiate track improvements whether performed by the host railroad or by a contractor with the host railroad's concurrence.

The Wally situation is different since GLC is offering to be the host railroad and the commuter service operator, and it is logical to implement service with GLC fulfilling both roles. The Wally Coalition could enter into an agreement that combines access and operations or could seek to develop a two-part agreement that separates the two in a way such that the service could be operated by another party at some future time either at the option of the Wally Coalition or upon mutual agreement of the Wally Coalition and GLC.

In either event, as soon as a decision is made to implement the service, access and operating negotiations should commence so that GLC can participate in service development and so that construction activities and track improvements may commence. RLBA understands that GLC must have the State's approval to operate passenger service, so both the Wally Coalition and GLC should continue their dialog with MDOT so that the needed approval is forthcoming on a timely basis.

Plans for connecting bus service will be finalized one the schedule is firm and incorporated into the commuter rail Operating Plan. The downtown distribution service to be operated by AATA and LETS is critical to the success of the commuter rail service because the majority of downtown employment destinations are too far for most people to walk from the Barton Station. Appropriate agreements between the Authority and AATA and LETS will be in place for transfer coordination, funding and operating coordination.

The following are Action Items:

The GLCR has produced an Operating Plan.

The AATA is finalizing plans for connecting bus service, operating agreements and funding provisions.

Section 4: Ridership Forecasting & Revenue

4.1 Ridership Projections

Ridership projections are shown in Table 4.1.

Table 4.1
Wally North South Corridor Daily Ridership Estimates

Station	2008	2013
Howell	350	
Chilson/Brighton	390	
Whitmore Lake	560	
Special Rider(Daily)	n/a	
Daily Total	1300	

Ridership is perhaps the most important single criterion in evaluating the feasibility of commuter rail service. Commuter rail service may produce several benefits such as mobility enhancement, highway congestion reduction, reduction in fuel consumption and air quality improvement. These benefits will not be attained unless the service attracts sufficient passengers to make an impact. Ridership is also critical to result in cost-effective service.

The Coalition's ridership estimates are based on responses to surveys conducted by the University of Michigan, Washtenaw County, Ann Arbor DDA and the Chambers of Commerce in Ann Arbor, Brighton and Howell. Population and employment data in Washtenaw and Livingston Counties also were used in the reasonableness estimations. In the following discussion it is important to keep in mind that "daily ridership" refers to daily weekday service since no service is contemplated on the weekends except for possible football excursions.

The single largest group of passengers expected on the Wally commuter rail line are daily commuters headed to the University of Michigan (including its medical center) in Ann Arbor. The University employs over 3,700 faculty and staff in the potential service

area, not including students. Based on its review of the survey results, RLBA estimates an average daily University-related ridership of 2,600 (1,300 roundtrips) per weekday. RLBA's adjustment is based upon survey responses which said they would use the service on different numbers of days per week ranging from five to only a single day per week. (It is understood that the revenue from monthly passes will not change, no matter how many trips are taken.) From this point on ridership will be referred to in terms of single rides and not roundtrips, which is industry practice.

Roughly 60 percent of projected University riders are staff at the medical center, which operates year round. The remainder are mostly staff which work twelve months each year as opposed to faculty which don't work year round. With that in mind, ridership could be higher during the normal school year if faculty and students that were not represented fully in the survey responses use the service.

The next two largest groups of potential riders were identified from a survey conducted by the Ann Arbor DDA, of parking permit holders, and an employee survey conducted by the Washtenaw County Government. Among Ann Arbor DDA parking permit holders, the survey showed that the average daily ridership would be 202 trips. The survey of Washtenaw County employees showed an average daily ridership of 82.

The Ann Arbor Chamber of Commerce survey was not included in the RLBA ridership estimate because of potential overlap with the other surveys. The Howell Chamber of Commerce survey was excluded because it was based on reverse commute train service which is not envisioned at the initial stage of Wally development. The Brighton Chamber of Commerce survey was not considered since it was deemed too general to provide a reasonable estimation of ridership.

RLBA estimated ridership from three other employers that were not included in the Coalition's surveys, but were interested parties in the formation of WALLY: the local Environmental Protection Agency office, St. Joseph Mercy Hospital and Washtenaw Community College. With roughly 4,750 employees at these three entities, RLBA estimates the average daily ridership at 194 trips.

The ridership and fare revenue projections business plan to reflect a monthly fare. The fares were raised based on the high increase in gasoline prices and estimate operational costs.

Commuting Cost Savings (000's)

	Monthly	Annually
Howell	$554	$6,648
Brighton	$285	$3,432
Hamburg	$210	$2,520
Whitmore Lake	$108	$1,296

Based on $3.00 per gallon fuel and no parking costs

4.2 Passenger Revenue Projections

The passenger revenue projections are based on the ridership estimates and an assumed fare structure. The fare structure is shown below.

Figure 4.1

Wally Commuter Rail Fares, 2008 to 2018
Monthly Trip Fares

Station	2008	2010	2015	2018
Howell	$145.00	$160.00	$205.00	$236.00
Chilson/Brighton	$140.00	$155.00	$196.00	$228.00
Hamburg	$135.00	$148.00	$189.00	$220.00
Whitmore Lake	$120.00	$133.00	$169.00	$195.00

When multi-fare discounts are factored in, the resultant average fare is $6.74 in 2008 and $7.44 by 2010. Commuter rail users are more accepting of higher fares compared with users of other forms of transit.

4.3 Analysis and Action Items

The ridership estimates are reasonable from the standpoint of mode share by commuter rail and a comparison with other similar services.

The new rail service's ability to actually realize this ridership level will depend on the reliability and ease of use of the service, fare levels versus driving and parking costs, and the effectiveness of a marketing and advertising program.

The marketing plan must take into account the impact of the following factors on new ridership and retention:

- Product (schedule, comfort, reliability, ease of use, etc.)
- Price
- Place
- Promotion: brand, ads, etc.

The ridership estimates developed for the project are viewed as a goal for service. The marketing and advertising efforts are expected to produce the ridership estimated for the project. A key measure of success for the project is the attainment of the project ridership levels.

The following are Action Items:

- Further ridership surveys should be undertaken.
- The assumed fare structure and passenger revenue estimates for the service will be monitored to ensure the fare levels are set appropriately.
- Connecting bus service is very important to attracting Wally ridership and must be carefully planned and well executed.
- Marketing and customer-interface programs are likewise very important in attracting riders and in obtaining rider feedback.
- Wally fare collection should be coordinated with that of AATA or LETS if connecting bus service in Howell is utilized.

Section 5: Capital Needs

This section addresses the budget and financing plan for the commuter rail upgrade and implementation program. The review covers design and construction of railroad track, stations and vehicle (i.e., rollingstock) preparation. Below is the Rail Infrastructure Improvement Preliminary Estimate revised in June 2008 by RL Banks & Associates.

Line Description

The rail segment from Ann Arbor to Howell consists of 26.90 miles of single line track from MP 47.50, north of Barton Road in Ann Arbor, to MP 74.40, Riddle Street in Howell. The existing track consists of 110#, 112#, and 115# rail with single and double shoulder tie plates and four and six hole-joint bars. The ends of the rail with four hole joint bars are bent. There are three passing tracks between Ann Arbor and Howell: Osmer 3,775 feet long, Whitmore Lake 1750 feet long and Chilson 3950 feet long. However, there aren't any sidings for midday or night time storage on either end of the proposed corridor. These existing sidings could best serve the corridor for freight and commuter if they were brought up to mainline standards during the rehab, which would add an additional 1.8 miles to the proposed rehab plan. A majority of the 34 public crossings are signalized. Any rail to be replaced within the rehab limits would be replaced with 115# rail, 600 ties per mile would be replaced, and 1000 tons of ballast per mile would be placed. Every public and private crossing surface would be rebuilt. There are three new passing and/or storage tracks proposed, locations to be determined by train schedules and depot locations. Passing tracks should be a minimum of 1000 feet in length and passing/storage tracks should be a minimum of 2000 feet in length to accommodate the cars and locomotives.

Taking into consideration that this is a passenger operation along with the frequency of train meets it is strongly recommended that the entire rail segment between Ann Arbor and Howell be operated on a Train Control System with power switches.

Currently the only signaled portion of the GLC corridor is the CSX crossing at Ann Pere, on which CSX provides the maintenance both of the diamond and the signal system allowing access to the interlocking. RLBA reviewed and utilized the initial GE Transportation Systems Global Signaling, LLC budgetary proposal dated February 28, 2008, in its preliminary capital cost estimate. After further discussion, RLBA believes that in order to provide an automobile competitive service, a complete Centralized Traffic Control (CTC) system is warranted, and estimates capital costs associated with that system.

RLBA's estimate of the CTC system cost is $4.4 million for signal equipment and $1.4

million for communications equipment, a total of $5.8 million. The quoted budgetary price of the ITCS system is $4.9 million based upon the assumption of using existing communications towers, which in fact do not exist on the GLC. Adding the same $1.4 million communications estimate would bring the ITCS total cost to $6.3 million. The two alternatives are quite close in cost; clearly the technology which best suits WALLY service should be the one selected.

Public Highway-Railroad Crossing Warning Device Enhancement Options

There are 34 at-grade public highway-railroad crossings between Ann Arbor and Howell. Twelve have passive warning devices, twelve have flashing lights and ten are equipped with flashing lights and gates. Train speeds of 40mph will not require modifications to any warning devices. Train speeds above 40 mph will require circuitry adjustments to certain crossings with active warning devices.** Circuitry adjustments cost roughly $3,000 per crossing. Installing or upgrading to new warning systems with gates costs approximately $135,000 per crossing.

To accommodate 40 mph passenger trains
Install lights & gates at all 12 crossings currently equipped with passive warning devices: $1.62M (optional)
Install gates at all 12 crossings currently equipped with flashing lights: $1.62M (optional)

To accommodate 59 mph passenger trains
Adjust circuitry at 12 crossings currently equipped with flashing lights and/or gates: $36,000 (required)
Install lights & gates at all 12 crossings currently equipped with passive warning devices: $1.62M (optional)
Install gates at all 12 crossings currently equipped with flashing lights: $1.62M (optional)

**crossings in speed-restricted track do NOT require circuitry adjustments, as they are already set for track speed.

5.1 Current Budget Status

Table 5.1 shows an analysis of the project's construction budget based on cost and forecast data available in June 2008. In the RL Bank's analysis the following capital needs were identified and estimated.

Table 5.1
WALLY Commuter Rail Projected Capital Costs

Improvement	**Estimated Cost**
Layover facilities	2,560,000
Rail and track rehabilitation	4,673,000
Turnouts/sidings	490,000
Rail Crossings	1,595,000
Signals	9,025,000
Stations	4,300,000
Other	4,395,000
Contingency (20%)	5,408,000
Total Capital Expenses	**$32,446,000**

5.2 Capital Funding

Total funding needed to cover the current forecast is $32.5 million. The WALLY coalition has secured $500,000 in Federal CMAQ funding (FY 2009) for station development. An additional $246,000 in state funds have been identified from the State of Michigan for a portion of the track improvements. Additional federal, state, local and private funds are anticipated to make up the balance of $31.75 needed for capital.

5.3 Other Pre-Revenue Service Activities

In addition to construction and other expenses shown in Table 5.1, there are activities that must precede revenue operations. These activities include securing all necessary agreements, including an operations contract with a GLCRR, equipment testing, training, etc.

Section 6: Commuter Rail Financing Plan[1]

The purpose of the financing plan is to ensure that sufficient funds are available to cover operating costs of the commuter rail projects as an on-going service after start up. Further, it is vital that these costs be covered both in the long term as well as the short term. A ten year budget was identified by RL Banks & Associated that covers operating the service is underway.

This section first presents an overview of the operating needs and funding sources for on-going operating expenditures. Finally, presented is a list of action items to ensure the longer-term financial viability of the commuter rail service.

6.1 Overview of Operating Expenses and Funding Sources

There are three basic funding sources for the commuter rail service. They are:

- Federal government through the Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA)
- State of Michigan through the Michigan Department of Transportation (MDOT)
- Local funding

Table 6.1
Projected Operating Expenses

Expense	Estimated Costs
Railroad Operations	$4,657,730
Other Operations	1,875,300
Authority	551,250
Total Operating Expenses	**$7,084,280**

Table 6.2
Projected Revenues

Revenue Source	Estimated Revenues
Fare box	$2,104,200
Advertising & Service	25,000
State/Federal Operating Funds	2,090,569
Local Operating Funds	2,864,510
Total Operating Revenue	**$7,084,279**
Fare box Recovery Rate	**30%**

Table 6.3
WALLY Ten Year Budget

Line	Item	Start-up Construction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	***Ridership***											
2	Based on 2,600 daily trips in Operating Yr. 1 and assumes 3% average annual growth		655,200	674,856	695,102	715,955	737,433	759,556	782,343	805,813	829,988	854,887
3	***Capital Plan***											
4	Total Capital Expenses	$ 32,446,000	$ 300,000	$ 311,400	$ 323,233	$ 335,516	$ 348,266	$ 361,500	$ 375,237	$ 389,496	$ 404,297	$ 419,660
5	Total Capital Funding	$ 575,900	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	**Capital Funding Surplus (Shortfall)**	**$(31,870,100)**	**$ (300,000)**	**$ (311,400)**	**$(323,233)**	**$(335,516)**	**$ (348,266)**	**$(361,500)**	**$(375,237)**	**$(389,496)**	**$(404,297)**	**$(419,660)**
7	***Operating Plan***											
8	**Expenses**											
9	Railroad Operations Expense		$ 657,730	$ 4,834,723	$5,018,443	$5,209,144	$ 5,407,091	$5,612,561	$5,825,838	$6,047,220	$6,277,014	$6,515,541
10	Other Operations Expense		$ 1,875,300	$ 1,948,437	$2,024,426	$2,103,378	$ 2,185,410	$2,270,641	$2,359,196	$2,451,205	$2,546,802	$2,646,127
11	WALLY Regional Transportation Authority (WRTA) Expense		$ 551,250	$ 572,749	$ 595,086	$ 618,294	$ 642,408	$ 667,462	$ 693,493	$ 720,539	$ 748,640	$ 777,837
12	**Total Operating Expenses**		**$ 7,084,280**	**$ 7,355,909**	**$7,637,954**	**7,930,816**	**$ 8,234,909**	**$8,550,663**	**$8,878,527**	**$9,218,963**	**$9,572,456**	**$9,939,504**
13	**Revenues**											
14	**Farebox Revenue**		**$ 2,104,200**	**$ 2,167,326**	**$2,232,346**	**2,414,282**	**$ 2,486,710**	**$2,561,312**	**$2,638,151**	**$2,846,691**	**$2,932,091**	**$3,020,054**

15	Advertising & Service Revenue		$ 25,000	$ 26,250	$ 27,563	$ 28,941	$ 30,388	$ 31,907	$ 33,502	$ 35,178	$ 36,936	$ 38,783
16	State & Federal Operating Subsidies		$ 2,090,569	$ 2,170,611	$2,253,718	$2,640,007	$ 2,738,600	$2,840,895	$2,947,029	$3,057,148	$3,171,403	$3,289,949
17	Grant Revenue		$ -	$ 1,510,000	1,250,000	$1,250,000	$ 1,250,000	$1,250,000	$1,250,000	$1,250,000	$1,250,000	$1,250,000
18	Other Government & Non-Government Organization Contributions		$ 2,141,000	$ 1,506,000	$1,506,000	$1,256,000	$ 1,256,000	$1,256,000	$1,256,000	$1,256,000	$1,256,000	$1,256,000
19	**Sub-total: Subsidies, Grants & Contributions**		**$ 4,231,569**	**$ 5,186,611**	**$5,009,718**	**$5,146,007**	**$ 5,244,600**	**$5,346,895**	**$5,453,029**	**$5,563,148**	**$5,677,403**	**$5,795,949**
20	**Grand Total Revenue**		**$ 6,360,769**	**$ 7,380,187**	**$7,269,626**	**$7,589,230**	**$ 7,761,698**	**$7,940,113**	**$8,124,682**	**$8,445,017**	**$8,646,431**	**$8,854,787**
21	***Operating Surplus (Shortfall)***		**$ (723,510)**	**$ 24,278**	**$(368,328)**	**$(341,587)**	**$ (473,211)**	**$(610,550)**	**$(753,844)**	**$(773,947)**	**$ (926,025)**	**$(1,084,718)**
22	***Net Capital + Operating Surplus (Shortfall)***	**$(31,870,100)**	**$(1,023,510)**	**$ (287,122)**	**$(691,561)**	**$(677,103)**	**$ (821,476)**	**$(972,050)**	**$(1,129,081)**	**$(1,163,442)**	**$(1,330,321)**	**$(1,504,378)**
23	***Accumulated Net Surplus (Shortfall)***	**$(31,870,100)**	**$(32,893,610)**	**$(33,180,732)**	**(33,872,293)**	**$(34,549,396)**	**$(35,370,872)**	**$(36,342,922)**	**$(37,472,003)**	**(38,635,445)**	**$(39,965,767)**	**$(41,470,144)**
24	***Key Ratios***											
25	Farebox Recovery of Total Operating Expenses		30%	29%	29%	30%	30%	30%	30%	31%	31%	30%
26	Farebox as Percentage of Grand Total Revenue		33%	29%	31%	32%	32%	32%	32%	34%	34%	34%
27	Total Operating Subsidies, Grants, & Contributions as Percentage of Grand Total Revenue		67%	70%	69%	68%	68%	67%	67%	66%	66%	65%

6.4 Federal Transit Administration

Funding from the Federal Transit Administration (FTA) are options to finance operating expenditures beginning in year three.

Capital Funding Programs

There are two federal capital funding programs that could be used for the on-going capital needs of commuter rail. They are:

Section 5307—Urbanized Formula

Section 5309—Fixed Guideway Modernization

Section 5307—Urbanized Formula

This program (49 U.S.C. 5307) makes Federal resources available to urbanized areas for transit capital and operating assistance in urbanized areas and for transportation related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. Virtually all transit systems in the U.S. rely on this funding source.

Eligible purposes include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

Funds are allocated to regions based on demographic and service variables. These funds can be used to finance rail capital needs but also can be used to finance the on-going maintenance expenses of the operation. The funds pay for 80 percent of the capital item's cost with remaining 20 percent coming from local entities.

Section 5309—Fixed Guideway Modernization

Grants for fixed guideway modernization projects come under 49 U.S.C. 5309. A fixed guideway refers to any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail, trolleybus, aerial tramway, inclined plane, cable car, automated guideway transit, ferryboats, that portion of motor bus service operated on exclusive or controlled rights-of-way, and high-occupancy-vehicle (HOV) lanes. Capital projects to modernize or improve fixed guideway systems are eligible including purchase and rehabilitation of rolling stock, track, line equipment, structures, signals and communications, power equipment and substations, passenger stations and terminals, security equipment and systems, maintenance facilities and equipment, operational support equipment including computer hardware and software, system extensions, and preventive maintenance. Up to eighty percent of eligible project expenses are covered by this funding stream with the

balance of funding coming from the local entity.

Funds are allocated by a statutory formula to urbanized areas with rail systems that have been in operation for at least seven years.

Operating Funding Programs

There are two Federal funding programs that will help cover the operating cost of the commuter rail service. The first is the previously described Section 5307. As preventative maintenance costs are operating in nature and preventative maintenance costs are eligible expenses under the 5307 program, this funding pool could help cover about 10 percent of the on-going operating expenses of the commuter rail service after the service is operating for the waiting period.

The other operating fund is from the Congestion Mitigation and Air Quality (CMAQ) program. While not strictly a transit source of funding, it can be used to finance transit operations. The primary purpose of the CMAQ program is to fund transportation projects and programs in non-attainment and maintenance areas that reduce transportation-related emissions. CMAQ funds are extremely flexible. The North-South Corridor Commuter Rail service will be an eligible expense. However, CMAQ dollars can only be used in this way for three years. The WALLY project intends to apply for three years of operating dollars through the Southeast Michigan Council of Governments and the Michigan Department of Transportation.

6.5 Michigan Department of Transportation

For on-going operations, the commuter rail service expects to rely on two sources of funding from MDOT. They are:

Act 51 State Operating Assistance

CMAQ funds allocated to the State

Rail Operating Assistance

Under Act 51 State Operating Assistance, urban recipients that operate in areas over 100,000 population is calculated at up to 50% of eligible operating expenses. The initial expected subsidy through the State Operating Formula is included in the budget Table 6.3. Beginning in year four, additional subsidies will be received from the Federal Operating Formula.

In-Kind Marketing

Once operating, the service will work to include funds from selling advertisements on the train cars. This revenue is not currently included in the budget.

6.6 Local Units of Government

To date there are five local units of government involved in the early financing of the commuter rail service. They are included in the budget in Table 6.3.

Several local units of government and agencies have committed contributions to the project. MDOT, for example, has committed $375,900 for the first year of capital. Great Lakes Rail Road

has committed $200,000 for capital improvements. Other significant contributions include $250,000 each year for three years from the Ann Arbor Downtown Development Authority, $25,000/yr for three years from the University of Michigan, Washtenaw County has committed $150,000, Northfield Township DDA $10,000/year for three years, and the Ann Arbor Transportation Authority has committed $50,000. According to the budget, additional funding sources will be needed in order to cover the start up and operating expenses. While these funds have been committed only for the first three years of operation, it is expected that much of this funding may be extended as the communities continue to see increasing benefit from the commuter rail line. Washtenaw County is beginning to explore other local funding options for long term operating funds.

6.7 Projected Operating Costs and Funding

Table 6.3, on page 24 and 25, presents a 10-year projected operating costs and funding plan.

The following assumptions have been made:

- Operating Revenue/Passenger Fares are based on 2600 daily trips in the first years with ridership growing by three percent per year.
- Operating expenses are based on the estimated contract price for track usage, operations and maintenance. Other items are estimated based on recent market prices.
- Federal Funds - CMAQ is anticipated for the first three years of operating and has been programmed into the Regional Transportation Plan
- State Funds are based on current MDOT commitments and current funding procedures. Local funding is based on the commitments expressed by the respective communities.

6.8 Analysis and Action Items

There is much still to be accomplished prior to the start up of service. The RL Banks report included the following action items:

1. Consider performing a more in-depth ridership analysis which includes total travel times and which determines daily ridership by station. RLBA does not consider this crucial; however, the in-depth analysis may provide important additional ridership information.
2. Resolve U.S. DOT (Department of Transportation) ADA (Americans with Disabilities Act) requirements, in light of the policy that platforms run the full

length of a passenger train and permit level boarding to all accessible cars.[1]

3. Arrange for all necessary funding (to cover both capital and operating expenses).

4. For each station, more detailed planning must be completed to include access and egress, transit interface, kiss and ride access, what is to be included on the platform (e.g., weather protection, communications, ticket vending machine), etc. RLBA strongly recommends full-train-length station platforms, regardless of ADA considerations.

5. The Coalition should make plans for adequate parking at all outlying stations, including an extra allowance for growth. This is deemed very important in attracting riders to the new service.

6. Where a developer is to provide some or all of the station parking (Howell, Lake Whitmore), or a church in the case of Chilson, the Coalition should negotiate appropriate agreements, including lease payment and availability dates.

7. Complete the NEPA (National Environmental Policy Act) process if required.

8. Apply for any necessary permits mandated by state or local codes (e.g., building codes).

9. Establish an authority to manage the service. It is the belief of at least one Wally Coalition official that establishment of an authority should be done soon, so as to provide an organization responsible for execution of these steps to initiate service.

10. Negotiate access and operating agreement with GLC (rights, responsibilities and compensation).

11. Negotiate access to Ann Arbor Railroad for use of that railroad's track to store empty passenger railcars.

12. Execute an agreement with CSX to assure passenger train priority at the Ann Pere crossing.

13. Decide the fare system (what fares to charge, how to collect single-ride fares, etc.), and do this in coordination with AATA. Customer convenience should be a paramount consideration.

[1] See www.fra.dot.gov/downloads/Research/commuterplatform.pdf

14. Arrange for connecting buses and negotiate payment agreements.

15. Update the business plan based upon results of the foregoing steps.

16. Execute rail defect testing and replacement. Execute engineering design of all infrastructure improvements (stations including parking and all platform components, improvement of track speed to support a top speed of 60 mph passenger train service, installation of signal system, Ann Pere changes as negotiated with CSX, any other changes required in other negotiations (*e.g.*, with GLC, AARR, AATA), layover facilities) and equipment improvements (passenger railcars), if required.

17. Improve track to automobile-competitive passenger train track speed, construct layover facilities, upgrade grade crossings, and install CTC (or equal) signal system.

18. Perform any required refurbishment and ADA reconfiguration of passenger railcars.

19. Procure passenger-train-speed locomotives.

20. Lease or otherwise acquire any property (real estate) required (for example, stations and layover facilities).

21. Prepare marketing and customer service plans which include vigorous advertising/marketing of the new service.

22. Train those who will manage the new service, and train and qualify passenger train crews.

23. Prepare a safety and security plan, and emergency response plans. Coordinate these with local and state authorities.

24. Perform final service testing prior to startup.

<u>Initial Steps to Define What Must Be Done (Steps 1-6)</u>

Steps 1 through 6 are the necessary first group of actions to provide the foundation for remaining actions. When these first six steps are completed, a basis for design is reasonably firm, and the Coalition may proceed safely to steps 6 and 7, NEPA process and permits, respectively.

Among these first six steps, the one which perhaps while require the most time is number 2, resolution of the ADA policy. It is impossible to provide a precise estimate of the time required, inasmuch as much of the action will be outside of the Coalition's ability to control. With assistance from elected officials, this step perhaps could be performed in

a matter of a few months.

Step 1, ridership, could perhaps be performed in 3 or 4 months, assuming the Coalition decides to do it and that priority is given to it.

If federal funding is not to used in implementing the service, then Step 3 could be accomplished in whatever time it takes to secure state and local funding.

Step 4, station planning, may be completed in a relatively short time, as soon as steps number 1 (ridership) and 2 (ADA compliance) are resolved.

Steps 5 and 6, both related to parking, may be executed quickly, assuming no difficulty in Step 6 negotiations, following completion of Step 1 (ridership by station).

The critical path with this group of six initial steps appears to lie in Step 2, resolution of ADA access. Assuming simultaneous efforts on all six steps, to the extent possible, RLBA estimates a minimum time (assuming high priority) of four months.

Pre-Design (Steps 7-14)

Steps 7-14 depend upon decisions and actions made in the first group (Steps 1-6) and must be accomplished prior preparation of designs and specifications preliminary to construction/fabrication/procurement.

If federal funding is not used in implementation, then Step 7 would not be required. If there are State of Michigan environmental requirements, they would have to be observed. Step 8 depends upon state and local codes, e.g., building codes.

Step 9, establish an authority to manage or govern the commuter rail service, can be effected at any time. It has been suggested that this step be accomplished first, so as to provide an entity responsible for overseeing all steps.

Negotiation of access and operating agreement with GLC (Step 10) should not take long inasmuch as that railroad is a willing partner, but negotiation of car storage with Ann Arbor Railroad (Step 11) may take some time.

Step 12, execution of an agreement with CSX to assure passenger train priority at Ann Pere crossing, was discussed with a Michigan Department of Transportation official, who seemed to think that this could be accomplished without too much difficulty.

Steps 13 and 14 involve fares and arrangements with local transit services. Presumably the Coalition can handle these steps with dispatch.

RLBA estimates that Steps 11 and 12 (negotiation with railroads other than GLC) would take the most time in this group of steps. Therefore the critical path lies through these two steps and is estimated at three months, assuming high priority.

Completion of Implementation Actions (Steps 15-24)

The Pre-Design Steps (7-14) provide a sound basis for updating the business plan (Step 15) in that Steps 7-14 include actions which refine the anticipated costs.

Step 16 (execute rail defect testing, and prepare designs and specifications) will require perhaps three of four months even if given a high priority and fast-tracked. Unless the Coalition or State is able to sole-source the design, additional time is required for preparation of a Request For Proposals document, advertising of same, preparation of proposals by bidders, and then selection of a consultant. This latter process can consume three or four months. Alternatively, perhaps the State of Michigan Department of Transportation can perform the design in-house or through an on-call contract. Absent that, RLBA estimates seven months or longer for Step 16.

Steps 17-20 constitute the construction, fabrication and procurement efforts necessary to improve the track to automobile-competitive passenger train track speeds, construct layover facilities, upgrade grade crossings, install a signal system (Step 17); perform any required refurbishment and ADA reconfiguration of passenger railcars (Step 18), procure passenger-train-speed locomotives (Step 19) and acquire land, if needed (Step 20). If it is necessary to advertise, an estimated three or four months are required prior to execution of the contracts for these procurements. Another four to six months will be required to perform the work. Total time for Steps 17-20 is estimated to be nine months.

Steps 21-23 (marketing and customer service plan, training/qualification of crews and final service testing, safety and security plan, and emergency response plan) presumably can be accomplished concurrently and within the "critical path" period of Steps 17-20.

Critical Path

	Months
Initial Steps to Define What Must Be Done (Steps 1-6)	4
Pre-Design (Steps 7-14)	3
Completion of Implementation Actions (Steps 15-24)	9
Total	16

7.0 Marketing Plan Analysis and Action Items

Marketing of a start-up rail service must, by its nature, be 'back-loaded'. In the year before service begins, there is a steady level of information and awareness building that should occur. This takes place at a relatively low intensity level. If done right the early efforts lay very important groundwork for the big push of marketing information in the last few months before and just after commencement of service. The later phase is designed to continue with awareness building, but at the same time, provide information that is actionable and moves people to make the modification in behavior to try the train.

The marketing plan elements will be considered in terms of potential market sectors to make sure that the marketing efforts being planned are comprehensively addressing the needs of various potential markets. For example, the downtown employee market, the reverse commute market and the special events market.

In several places, the Marketing Implementation Plan states "if budget is available" for certain marketing efforts. Prioritization of marketing efforts identified in the plan will be undertaken to assure that budget constraints do not impede progress of the most important marketing items. Budget commitments will be made to marketing activities as soon a possible. Joint marketing efforts will be undertaken with other agencies, such as the MTA, to maximize results for dollars spent.

Section 8: Implementation Plan

The key elements of an Implementation Plan are:

- A "Startup" Plan to finalize the tasks required to be addressed for successful startup of the commuter rail service.
- The management "Action Item" List of items that must be addressed prior to the start up of service will be updated regularly at the project team meetings.
- A project schedule is maintained by the Rail Project Manager.

In addition, this Business Plan is designed to serve as a guide to implementing the project.

8.1 Startup Plan

This document will include tasks necessary for initiation of the commuter rail service covering the following areas:

Staffing and organization
Transportation, including procedures development and testing
Maintenance and engineering
Training
Safety
Security
Finance
Service integration
Fare collection
Public information

The Startup Plan will include the identification of the party responsible for the task and

timing and schedule.

8.2 Action Items List

The Action Items List lists required tasks along with the responsible party and timing. It covers the following areas:

Funding
Design
Property Acquisition
Construction
Project Management
Ticket Vending Machines
Vehicles
Startup/Test
Operations

8.3 Project Schedule

The project schedule is maintained using scheduling software suitable for the purpose. In addition to showing information on timing, the schedule shows how various tasks relate to each other. The project schedule is updated regularly to show actual progress compared with the baseline schedule. RL Banks has identified 16 months as the amount of time to complete the necessary work.