

# 1. Introduction

## 1.1 What is a COA?

A Comprehensive Operational Analysis (COA) is an in-depth study of a transit system to identify strengths and weaknesses, and develop recommendations for improvement. It is an opportunity to gather input on the system from a variety of sources and build support for common goals.

The COA aims to answer the following questions:

- Who are Broward County Transit's (BCT's) current and potential customers?
- How is the overall system performing and what are the areas for improvement?
- How can BCT best serve its markets within its financial and operational capabilities?

The COA process involves collecting a comprehensive set of market-based and service-based data to provide a detailed picture of how customers use the BCT system. Combined with input from staff, key stakeholders, and the general public, the information provides the necessary background to recommend improvements to the BCT system.

## 1.2 Why Conduct a COA?

BCT services carry roughly 40 million passengers each year, and are highly cost-effective compared with similarly-sized transit systems. While BCT is doing a lot of things right, the agency must progress to the next level in order to continue to attract ridership. Transit service is more important than ever due to increasing population and concerns over the environmental and quality-of-life impacts of private automobile travel. The COA process provides a thorough look inside the BCT system to determine which aspects perform well, which need improvement, and how BCT can chart a course for the future to attract ridership and growth.

### Plateau in Ridership

Ridership showed a 21.6 percent increase over the five year span from 2002 to 2007 but has dropped a total of 6.1 percent over the past two years. The decrease, or plateau, in ridership that BCT has experienced since FY 2007 can be attributed to two consecutive years of fare increases and to little or no service improvements resulting from budgetary constraints. The average annual loss of 3.1 percent of BCT's ridership was much less than the anticipated 6.3 annual loss due to the gas price explosion that occurred during FY 2008. Many agencies experienced ridership increases during FY 2008 due to the increase in gas prices.



### Need for Innovation and Investment

BCT provides quality local bus service for its customers. Undertaking a COA is an excellent time to evaluate and recommend new techniques which make transit travel more attractive to consumers and more

competitive with car travel, such as more frequent service, higher-quality stations and vehicles, and technology such as transit signal priority and real-time information. Much like corporations, transit agencies must innovate in order to grow their market share.

### Limited Funding Resources

Across the country, transit agencies are dealing with the effects of reduced tax revenue in a recession environment, and BCT is no exception. There is a need to prioritize the funding available to ensure that it serves customers in the most efficient and effective ways possible. The COA analyzes market demand as well as service provided, in order to continue providing valuable service with reduced revenue.

## 1.3 Background

Broward County's population is increasing. The County contained 1.75 million residents as of 2008 (US Census), and this is expected to grow to 2.25 million by 2035 according to the Broward Metropolitan Planning Organization (MPO) population projections. Broward County is bordered by Miami-Dade County to the south, Palm Beach County to the north, the Everglades to the west, and the Atlantic Ocean to the east, meaning that population growth will be directed into currently-developed areas. Transit service will play an important role in providing transportation to a densifying region. BCT will also need to continue to develop linkages with the other systems in the region: Miami-Dade Transit, Palm Tran, and South Florida Regional Transportation Authority (Tri-Rail).



To provide a better understanding and assessment of the transit needs of Broward County, it is necessary to examine previous studies. These documents provided insight into the planning process.

- **Broward County Transit Development Plan 2009 - 2018 (TDP):** As required by state law, Broward County developed a ten-year strategic transit plan in 2008 that provided the public, policy makers, and BCT an invaluable overview of transit successes and needs in the County. The TDP provides a detailed description of the existing community and its demographics, existing transit system with comparisons to peers, local and regional situational appraisal, a public involvement program, agency goals and objectives, as well as a ten-year prioritized service and capital plan with annual updates.
- **Broward MPO 2035 Long-Range Transportation Plan Update :** The Broward Metropolitan Planning Organization (MPO) 2035 Long-Range Transportation Plan (LRTP) was designed to guide the development of Broward County's multi-modal transportation network through the year 2035. The plan is used to prioritize the majority of transportation spending through 2035 and reflects the choices and desires of many of Broward County's residents, workers, and visitors. The plan is

updated every five years, as required by federal law, to reflect the changing needs of the County's residents, workers, and visitors.

## 1.4 Goals and Objectives

A COA is the necessary next step to further improve the current BCT system. In an effort to achieve this and ensure that overall mobility is truly improved for the citizens of Broward County, BCT procured the services of Transportation Management & Design, Inc. (TMD) to perform a COA in which they are to review, analyze, and recommend further improvements to service. Below are the goals and objectives of this analysis:

- **Goal 1 – Identify the existing and potential transit user – e.g. understanding the transit market.**
  - Objective 1A – Collect a comprehensive set of customer data.
  - Objective 1B – Collect a comprehensive set of future transit demand information.
  - Objective 1C – Solicit the public interest in enhancing transit service.
- **Goal 2 – Identify current and future transit service opportunities.**
  - Objective 2A – Review existing and future plans and prioritize implementation of expanded service types.
  - Objective 2B – Identify gaps in future and existing transit service.
- **Goal 3 – Refine BCT's service to maximize the use of public funds.**
  - Objective 3A – Identify the potential to deliver the same or additional transit service for lower cost.
  - Objective 3B – Identify service plan recommendations for BCT.
  - Objective 3C – Implement the preferred service plan.

## 1.5 COA Components

In order to achieve a successful COA, it is necessary that all goals and objectives are completed. The following key deliverables are extremely helpful tools to ensure a thorough analysis.

- **BCT Market Analysis:** An examination of current and future demographic and mobility needs of the residents in Broward County. The potential of expanded BCT service within the current system service area is closely reviewed, where service needs adjustments (decreases or increases in service), or where alternative service options are more appropriate. Latent demand analysis will provide comprehensive insight into opportunities for BCT to improve its market position, ridership growth, and service performance.
- **BCT Service Assessment:** A complete evaluation of the performance of the existing BCT transit network identifying current transit successes and bringing to attention opportunities for the improvement of currently offered services. Specific review is placed on the performance of BCT's

fixed route-transit services with focus on the following: transit network overview, service ridership, service performance, and service quality.

- **BCT Service Framework:** Intended to provide a background for proposed network modifications and additions. The future network should be developed to ensure a customer focused, easy to understand, sustainable transit system. Establishing a service hierarchy provides a direct path to achieve this by specifying where investment to the areas in the system will have maximum effect and benefit for BCT users. Creating service classifications in all areas of the system will help reflect current BCT successes, identified market needs, and transit industry best practices.
- **BCT Service Plan and Final Report:** Following the development of recommendations for improvement to existing services and the final recommendations for new services, the project team developed a plan to implement changes, including 1-3 year, 4-6 year, and 7-10 year recommendations; maps and alignment descriptions of all route alignment changes; service attributes for each route; and fleet changes.