



# CHAPTER I

## Introduction

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The Boone County Community Partnership (BCCP) contracted with LSC Transportation Consultants Inc., VHB, and the Missouri School of Journalism, Center for Advanced Social Research, to prepare a comprehensive inventory and needs assessment of the human transportation services in Boone County, Missouri. The project focused on transit needs within Boone County and Columbia (the largest incorporated area in the county), and those coordination efforts to meet the needs. This report presents a summary of the planning process and scope of work, project goals, key terminology, a review of community input, an assessment of the transit needs in Boone County, and the potential for various coordination strategies.



Residents of Boone County have recognized the need for increased public transportation in the area. Several studies have recognized the significant unmet need for transit services, and the need has been documented. For some area residents, the need for public transportation service is of high concern as it will enable residents to travel from home to work, shopping, health care facilities, and other necessary services. For many residents, the public transportation system links them directly with the community. The rural character of Boone County makes transportation services crucial for those members of the area who are dependent upon alternative forms of transportation to the private automobile. The City of Columbia acts as both a local and regional hub for shopping, health care, social services, and other services. Several agencies have been identified as providing transportation services in the greater Boone County area; however, many of these “providers” are not transportation providers in the normal sense of the word. Many of the “providers” are social service agencies who provide some form of transportation to their clients, whether that be a medical trip in a personal automobile of a case worker or providing vouchers for the local taxi service.

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Providers such as Columbia Transit and Para-Transit (which provide service within the City of Columbia), OATS (which provides service in both the rural areas of the county as well as in Columbia), and Services for Independent Living provide a greater portion of the trips in the county; however, other agencies which provide transportation provide a significant number of trips as well.

BCCP has taken the initiative to pursue a services inventory and need assessment as an initial phase of a countywide coordinated transportation system. A Steering Committee was formed and reviewed all documents and products throughout the course of this project. A subcommittee was established to aid in the creation of community surveys which targeted current users of transit/transportation, college students, local employees, and the general community. This information helped to determine both the current and future need for transportation.

Coordination of services is also receiving an emphasis at the federal level. The President issued an Executive Order addressing coordination of federally-funded transportation programs, and the federal government has established the “United We Ride” program to encourage and support coordination efforts. Funding has been made available to implement coordination programs. The most recent federal transportation legislation includes a requirement to develop a local coordination plan for human services transportation to support funding requests.

There is a wide level of support within the community for coordination of transportation services. Local businesses, agencies, and governments have expressed support; however, lack of interest in coordination of services will be a factor in implementing any of the coordination strategies described later in this report. This is a key component to implement any coordination efforts between small agency providers and the larger Columbia Transit system. There must be broad-based local support among both the private and public sectors. The current level of support is a foundation upon which to build and indicates a likelihood of future success between both governmental entities.

There are existing resources in the area used by human services agencies to provide transportation services for their clients. The existing resources represent a

significant investment and may provide some of the resources necessary to implement a countywide public transit service. Coordination and consolidation of services typically allows local entities to provide additional and enhanced service to the community using existing resources. A key issue in this project is to identify those existing resources which are available and any additional resources which may be needed to provide transportation service.

## PURPOSE OF THE STUDY

The purpose of this study is to document the existing resources and current needs within Boone County. The finished product of this study will describe the existing conditions in the city and county related to transportation services, discuss coordination of service and other alternatives for meeting needs into the future, identify the barriers, both perceived and real, for successfully coordinating resources, and present the obvious coordination strategies which should be pursued immediately. It is foreseen that this project will aid the local champions in the identification of service and existing gaps. This project is seen as the first step in the coordination of resources, and may likely lead to a second phase which will serve as the coordination plan for Boone County.

## REPORT CONTENTS

Chapter II presents the common terminology which will be used throughout this project. Many of the terms are used regularly, while some are specific to issues addressed later in this project. It is important to document these terms which will be used so that all who read the study have the same definitions.



Chapter III presents a review of previous studies and planning efforts, including a review of the 2025 Transportation Plan, local initiatives, such as work on a needs assessment in the region, Statewide Needs Assessment, and others as appropriate.

Chapter IV presents a summary of key person interviews conducted primarily during August 2005. Local community representatives, leaders, and other iden-

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tified key individuals were interviewed to gain a local perspective on the issues, barriers, challenges, and successes of coordination between entities, organizations, and agencies. These interviews are presented in a broad form. No one person, agency, or entity is identified nor are specific statements attributed to any individual.

Chapter V presents a summary of how agencies were identified and how data were collected and tabulated. Two separate categories of providers were initially identified by the Steering Committee and BCCP—those who were deemed transit providers and those deemed human service agencies. Chapter VI presents a summary of the two primary transit providers—Columbia Transit and OATS—and Chapter VII provides a summary of the human service agencies.

Community characteristics are described in Chapter VIII. These include demographics and economics. Key transit potential transit destinations are also identified.

Chapter IX presents current and future demand based on several specific models of estimation. The product of this chapter is a clear picture of transit needs based upon quantitative models. These models were adjusted to reflect actual conditions observed in Boone County.

Chapter X presents the results from a survey of University of Missouri students and employees, because the University is a major generator of transit trips. This section of the population has specific needs of its own and therefore is treated as such in estimating the need for transportation services. Chapter XI presents an analysis of the Agency Client survey questionnaires. Surveys were sent out to those agencies which may have client-based transportation needs. The survey results are presented in text, tables, and graphs. Chapter XII presents results from a community-wide survey of residents. This survey does not represent one specific user of transportation services, but broad-based community input into current and future transportation needs. These qualitative and quantitative needs help to validate the estimates made in Chapter IX.

Coordination opportunities are identified and the potential for implementing the various coordination strategies is described in Chapter XIII. These coordination opportunities will form the basis for selecting preferred strategies and developing an implementation plan for coordinated services in Boone County. As shown in Chapter XIII, there are many opportunities to coordinate activities among the various transportation providers. Some of these have more potential than others. Much of the potential for successful implementation will depend on the willingness to participate and the support for coordination among the different agencies which either fund or provide transportation services.

## **OPPORTUNITIES FOR PUBLIC INVOLVEMENT**

Throughout the planning process, public involvement is key to the success of any type of plan for the community. The Steering Committee provided input and feedback throughout the study. This involvement included identification of issues at the project kick-off meeting and feedback on each of the four Technical Memoranda which were submitted. The Steering Committee represented transportation providers, agencies with clients needing transportation services, and users of transportation services.

At critical points during the process, public meetings were announced and held where citizen participation was openly welcome and appreciated. In addition to these meetings, a community-wide survey was available on the Internet, surveys were distributed through various outlets, and presentations were made to local organizations. A series of open houses were held in early November 2005 to provide an opportunity for residents to identify issues related to transportation services. These were held at Brady Commons on the University of Missouri Campus, the Columbia Library, the Wabash Transit Center, and the Resource Center. A public meeting was held April 12, 2006 at the Columbia Library to present the transit needs assessment. Public input was sought regarding this quantitative assessment and the analysis of community input from the various survey efforts.

Additional public input will be sought on the Draft Report as it is presented to the community.

## SUMMARY OF THE ISSUES

During the August kick-off meeting, the LSC Team briefed the Steering Committee on the study process to be undertaken over the year-long period. Major issues and concerns regarding transportation were discussed. To identify those issues, the United We Ride Framework for Action, Community Self Assessment was used to document a series of issues. Twenty-six questions were asked of the Steering Committee regarding coordination issues. Following are questions and a summary of answers from that Community Self Assessment interaction with the Steering Committee:

1. Have leaders and organizations defined the need for change and articulated a new vision for the delivery of coordinated transportation services?

***Response: Needs action.***

2. Is a governing framework in place that brings together providers, agencies, and consumers? Are there clear guidelines that all embrace?

***Response: CATSO, Boone County Working Group; however, needs significant action taken.***

3. Does the governing framework cover the entire community and maintain strong relationships with neighboring communities and state agencies?

***Response: The Boone County Working Group does this well; however, a governing framework needs to start.***

4. Is there sustained support for coordinated transportation planning among elected officials, agency administrators, and other community leaders?

***Response: There is support from elected officials; however, there is guarded support from agencies and an opposition to raising taxes.***

5. Is there positive momentum? Is there growing interest and commitment to coordinating human service transportation trips and maximizing resources?

***Response: Yes, there is positive momentum. However, the commitment to coordinate human service transportation trips needs action.***

6. Is there an inventory of community transportation resources and programs that fund transportation services?

***Response: This is part of this project.***

7. Is there a process for identifying duplication of services, underused assets, and service gaps?

**Response: This is part of the current project.**

8. Are the specific transportation needs of various target populations well documented?

**Response: This is outdated information; however, it is part of the current project.**

9. Has the use of technology in the transportation system been assessed to determine whether investment in transportation technology may improve services and/or reduce costs?

**Response: This is part of this coordination study.**

10. Are transportation line items included in the annual budgets for all human service programs that provide transportation services?

**Response: Some agencies do this; however, this needs to be addressed.**

11. Have transportation users and other stakeholders participated in the community transportation assessment process?

**Response: Yes, this is done well.**

12. Is there a strategic plan with a clear mission and goals? Are the assessment results used to develop a set of realistic actions that improve coordination?

**Response: No, there is no strategic plan with a clear mission and goals. The MPO and the City's Consolidated Plan are used.**

13. Are clear data systematically gathered on core performance issues such as cost per delivered trip, ridership, and on-time performance? Are the data systematically analyzed to determine how costs can be lowered and performance improved?

**Response: This is gathered and analyzed by some.**

14. Is the plan for human services transportation coordination linked to and supported by other state and local plans such as the Regional Transportation Plan or State Transportation Improvement Plan?

**Response: Not at this time; however, this needs to occur.**

15. Are data being collected on the benefits of coordination? Are the results communicated strategically?

**Response: Not at this time; however, this needs to occur.**

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16. Does the transportation system have an array of user-friendly and accessible information sources?

***Response: There are varying formats and sources currently.***

17. Are travel training and consumer education programs available on an on-going basis?

***Response: There are some training programs, but on a limited basis and are program-specific.***

18. Is there a seamless payment system that supports user-friendly services and promotes customer choice of the most cost-effective service?

***Response: Not at this time.***

19. Are customer ideas and concerns gathered at each step of the coordination process? Are customer satisfaction data collected regularly?

***Response: This has not occurred. Some individual agencies collect customer satisfaction data.***

20. Are marketing and communications programs used to build awareness and encourage greater use of the services?

***Response: Yes; however, they are limited and not viewed as effective.***

21. Is there a strategy for systematic tracking of financial data across programs?

***Response: Not at this time.***

22. Is there an automated billing system in place that supports the seamless payment system and other contracting mechanisms?

***Response: Not at this time.***

23. Has an arrangement among diverse transportation providers been created to offer flexible services that are seamless to customers?

***Response: Not being done currently.***

24. Are support services coordinated to lower costs and ease management burdens?

***Response: Yes, MoDOT is doing this through joint purchases.***

25. Is there a centralized dispatch system to handle requests for transportation services from agencies and individuals?

***Response: No, this is not occurring at this time.***

26. Have facilities been located to promote safe, seamless, and cost-effective transportation services?

***Response: This is not a regular practice. Some facilities have been located in areas not served by Columbia Transit.***

## PROJECT GOALS

As part of the initial kick-off meeting held in Columbia, the Steering Committee developed general project goals which will guide the planning process throughout the course of the study. The following presents the paraphrased goals of study:

- Should be a thorough needs assessment.
- Should identify what is wanted and/or desired as well as what is needed.
- Should include an inventory of the existing service provided.
- This inventory should be updatable.
- The study should have the capability to be repeated.
- Participation from the public is a key element.
- Local education is vital.
- Study should identify those opportunities for coordination.
- Trusted data will be used to allow for credibility.
- The study should provide a general conceptual framework for service (25 years).
- Should build social capital.
- Development of standards.
- The potential for enhancement of service and support.
- The Steering Committee/Working Group needs a better name.
- What would it take to get people to use transit?

## SCOPE OF WORK

The following section presents the Scope of Work which was undertaken for this project. Six main tasks were undertaken during this study, many with corresponding subtasks. This section is organized in sequential order of the task with a statement of purpose, the approach to the specific task, and a product.

## **Task 1: Terminology and Community Standards**

**Purpose:** The purpose of Task 1 is to establish the communication links and information processes which are necessary to the success of the program.

**Approach:** The LSC Project Manager will coordinate directly with the Project Director throughout the course of the study. LSC will develop and provide a list of data items needed for the study. An initial “kick-off” meeting will be held in Columbia with the BCCP Steering Committee, staff, local stakeholders, and other transit/transportation agencies. The meetings will discuss issues important to all concerned, as well as clarify project goals and objectives and important local priorities and concerns.

Frequent communication will provide close coordination among the Consultant Team and the local staff, and inform the study participants of the progress made on the study. Monthly written status reports will be provided which will indicate progress, work completed, and upcoming work on the coordination process. This task is seen as an ongoing process which will relate directly to each of the other tasks throughout the work program. LSC will conduct presentations for the Steering Committee at key points throughout the study. At the second and third meetings, LSC will present a Technical Memorandum. At the final meeting, LSC will present a draft report of the final plan.

Our communication with the local community includes the public involvement program described in the public involvement subtask. We will strive to involve as many local residents as possible. At each of the four public meetings, LSC will conduct a roundtable with the Steering Committee and the public in order to create a setting of open dialogue regarding the direction of the study.

### **Goal Setting**

The purpose of this subtask is to develop project goals and objectives for completion of this coordination study.

At the kick-off meeting with the Steering Committee, we will facilitate a discussion to develop the project goals and objectives. We anticipate this meeting will last up to four hours. One tool which we plan to use is the self-assessment of coordination developed as part of the FTA’s “United We Ride” initiative. The LSC Team will document in a written memorandum the goals and objectives of the project. Specific objectives will be developed for each of the established study goals for review and comment by the Steering Committee.

### **Review Relevant Plans and Studies**

The purpose of this subtask is a comprehensive review of current and relevant plans and studies. The LSC Team, in conjunction with local BCCP Staff, will review relevant plans and studies related to transpor-

tation, land-use development, capital improvements, and others identified by the Steering Committee. These plans will provide insight into future development patterns and planned transportation activities. These documents will help clarify community values, goals, and provide direction for the coordination process.

### **Community Involvement**

The purpose of this task is to obtain input from the public to ensure that the study products reflect the issues, concerns, and desires of the community and its surrounding areas.

The source of public input will be the public meetings and the round-table meetings with both the public and Steering Committee. The Steering Committee will provide a cross section of the community and ensure continuity of input from community representatives throughout the process.

We will also conduct interviews of key stakeholders. Numerous individuals to be interviewed were identified by the BCCP Steering Committee. The Consultant conducted the interviews using a structured interview format with open-ended questions. The interviewers asked follow-up questions based on the responses of the stakeholders.

We propose to conduct three public meetings during the project. The first open house would be held to discuss the inventory and analysis. Open houses would be held at several locations such as a retail center or other area that generates public activity. A Planning Team representative would be there to inform the public on the study and solicit comments and suggestions.

The second meeting will be to provide information on the assessment of need. The last public meeting will introduce the Draft Report. We recommend that a central location be used for the open houses and that they be held from late afternoon through early evening so that people have the option of when to attend. We will work with the Steering Committee to identify an appropriate location and time for each meeting.

We also propose to place project documents and information on the Internet. We have found this to be an effective means of providing project information to the greatest number of people. This also provides a way for local residents to contact the project team, either via e-mail or using our toll-free telephone number which will be included with all project information. We will also maintain a mailing list (both e-mail and mailing addresses) of those who attend the various meetings or express an interest so they may be kept informed about the study progress. We will send e-mail notices of upcoming meetings as well as postcards to those not on the e-mail list.

**Product:** The product of this task will be a clear understanding of the role of the Consultant, the issues and concerns of the project, and the strategies

for completion of the coordination study. This task will be documented in Technical Memorandum #1. We will provide one bound copy of each Technical Memorandum as well as posting each document on our website in Adobe Acrobat format.

## **Task 2: Inventory of Existing Service**

**Purpose:** To compile a comprehensive inventory of transportation services in Boone County.

**Approach:** LSC will compile data regarding all current transportation providers in the area. An inventory of all transit providers (both public and private) that operate in the area will be incorporated into this study. A profile of each transit provider will be prepared to include the following:

- Name of operation, location, and type of ownership.
- Operating policies and procedures.
- Service area and clients served.
- Hours of operation and level of service.
- Routes, schedules, reservation policies, and dispatch procedures.
- What agencies provide transportation as support to their primary mission.
- Number of passengers and passenger-trips by market segment, route, time of day, and day of week (this will be collated by percentage of trips).
- Data on unmet service requests (both actual and perceived).
- Performance data and reporting procedures.
- Operating budget, funding sources, and financial program.
- Operator's equipment and facilities including an inventory of lift- or ramp-equipped vehicles that are available for short- and long-term lease and/or rent.
- Coordination efforts with other providers and agencies.
- System management structure.
- Staffing.
- Maintenance arrangements.
- Marketing efforts.
- Agency interest in additional coordination.
- Administrative capabilities and abilities of agencies to assume coordination roles.
- Aggregate financial resources devoted to transportation.
- Individual and aggregate physical capabilities of fleet and infrastructure support, and an overview of peak and non-peak service times.
- Identification of populations served and underserved throughout Boone County.
- Thorough analysis of all individual and aggregate regulatory, statutory, and other regulations at the provider level as they pertain to providing coordinated transportation services.

- General information which potential riders would need in order to determine suitability of a service to meet their need.
- Other data as determined by key participants, or the Planning Team.

LSC and CASR will develop a questionnaire to collect the agency information. The draft questionnaire was submitted to the Steering Committee for review. CASR will then administer the survey through telephone contacts, mailing of the survey instrument, and follow-up telephone calls to collect the data.

**Product:** The inventory of existing services will be presented in Technical Memorandum #2 in narrative form with supporting tables and graphics. Graphic information will include ridership trends, performance measures, maps of service areas, and routes. We will provide one bound copy, one digital reproduction quality original of the Technical Memorandum, as well as an electronic version posted on our website.

### Task 3: Assessment of Need

**Purpose:** To conduct a thorough assessment of the needs for significantly enhanced and coordinated transportation in Boone County.

**Approach:** LSC will employ a series of demand estimation techniques for both the general population and particular market segments, including elderly and disabled populations. It should be noted that our firm has developed demand estimation techniques such as the TCRP methodology for Rural Transit Demand and the Mobility Gap. We have also developed urban transit demand models using socioeconomic factors such as household size, income, and vehicle ownership. We will provide a quantitative estimate of demand based on these demographic factors. A key element will be to establish the level of need and unmet needs within Boone County. Projected changes in land use and population will be used to develop projections of future needs for 5-, 10-, and 20-year horizons.

Specific techniques to be employed will be a fixed-route demand model for the urban area and the TCRP rural methodology for rural areas of the county. We will also use a model to estimate demand for paratransit trips published by the FTA in the ADA Paratransit Handbook. Program trips will be estimated using the TCRP rural methodology with parameters adjusted to reflect observed demand rates for the programs in Boone County.

As part of this task the Consultant Team will identify likely transit trip generators such as retail centers, medical facilities, educational institutions, social service agencies, and major employers. Input from local staff and the Steering Committee will be required to help identify

the major transit trip generators. This information will be presented on a map of Boone County.

The Consultant Team proposes to use the local agencies to conduct surveys of their clients and constituents. Several survey questionnaires will be distributed by members of the Partnership. The local agencies will be responsible for administering the survey and collecting all data. We will also provide a questionnaire for each human services program regarding the number of participants, transportation needs, and the amount of service currently provided. We will enter the data into a database and analyze the data. Information we will collect will include demographic data, transportation needs and desires, perceptions of existing services, utilization of existing services, and barriers to use of existing services. We will also ask respondents to indicate which characteristics of transportation services are most important.

In addition to the quantitative estimates of transit demand, other needs will be sought through the public participation process. These additional needs will be quantified to the greatest extent possible. Each of the various market segment demands will be aggregated into a single estimate of total demand within Boone County. These estimates will be developed on a census block group level to assist in the identification of specific areas that warrant the need for coordinated service.

**Product:** This task will provide all the data and assessments as discussed in the Request for Proposal. This information will include baseline data and projections of future needs. We will include this information in Technical Memorandum #3.

#### **Task 4: Opportunities and Potential**

**Purpose:** To conduct a thorough assessment of the opportunities and potential for significantly enhanced and coordinated passenger transportation services in Boone County.

**Approach:** Using the populations and data identified in the document to this point, the Planning Team will prepare a study that will detail the following:

- Underutilized resources.
- Resources available to assist with coordination efforts.
- Ideas on how best to inform the community on the resources available.
- How better utilization of transit improves the quality of life in Boone County.
- A limited assessment of the probability of obtaining a local dedicated tax for public transportation based on public input, agency revenues, and interviews conducted in earlier tasks.

- Identify potential methods of achieving maximum utilization of existing resources.
- Detailed description of funding sources available to fund unmet need.
- Opportunities for coordination with other modes of transportation such as cycling.

The Planning Team will also facilitate a meeting with the transportation and business community to discuss possible coordination efforts. The Steering Committee will identify and recruit participants for this meeting. The Steering Committee will also be responsible to arrange for a location of the meeting.

The opportunities will be discussed initially with the Steering Committee during the meeting held prior to this task and then in detail as we meet to present Technical Memorandum #4. The Steering Committee will provide input regarding their perceptions of the various opportunities for coordination and will provide direction for the LSC team's work in Task 5.

**Product:** The results of this task will be detailed in Technical Memorandum #4.

## Task 5: Potential for Coordination

**Purpose:** To furnish a report that outlines obvious potential coordinating opportunities, qualifies needs and wants, and details the potential economic development as a result of coordinating transit services.

**Approach:** The Planning Team, led by BMI-SG, will develop a report for potential coordination of the human services agencies in Boone County. This report will analyze the information gathered in the previous tasks and present it as the draft to the final report. As required by the RFP, this report will include the following:

- Obvious coordinating opportunities and alternatives: Research inevitably will show that there will be obvious coordinating opportunities that may be started easily with little or no additional costs. The Planning Team will point these out and methods on how the coordination will work.
- Identification of potential opportunities and alternatives: This section of the report will catalog potential coordination efforts and what administrative, operational, or financial efforts will be needed to see the coordinating effort to fruition. The Planning Team will draw from analysis of existing planning efforts, provide examples of other systems with similar experiences, and provide the best opportunities to maximize services. The Planning Team will also outline federal and state efforts—such as “United We Ride”—in this area and give examples of successful coordinating efforts in other communities similar to Boone County. We will

also qualify the needs and wants with a list of criteria of eligibility for existing services and funding and capacity of existing services.

- Detail potential economic and quality of life impacts: The Planning Team will generate estimates on positive economic and environmental impacts of coordinating transit services. Coordinated trips can carry more passengers per trip using fewer vehicles which will lead to less operational and maintenance costs and fewer emissions. It can also expand service areas which may allow individuals to find a job now that transportation is available which is a positive economic benefit.

All of the material presented in the four Technical Memoranda will be incorporated with the recommendations from this task into a Draft Report. The Draft Report will be submitted for review by the Steering Committee and the community. We recommend allowing several weeks between the submission of the Draft Report and the meetings of the Steering Committee and the public. This will provide ample opportunity for review of the Draft Report prior to the more formal presentation. We also recommend that the public meeting be held before the Steering Committee meeting so that Steering Committee members have the opportunity to hear the public comments before providing direction for any revisions to be incorporated into the Final Report. We will prepare PowerPoint presentations, display boards, and handouts as appropriate for these meetings.

**Product:** The product of this task will be a Draft Report for review by the Steering Committee and the community.

## **Task 6: Final Report**

**Purpose:** To provide the final Coordination Initiative Report.

**Approach:** The Draft Report will be made available for public review and presented at public meetings as well as to the Steering Committee. The Draft Report will be presented to the BCCP for adoption. All public comments will be documented and addressed in the Final Report. Changes to the plan, based on public input and direction from local officials, will be incorporated into the plan.

**Product:** This task will provide the Final Report documents for the Boone County Coordinated Transportation Initiative. We will provide 20 bound copies of the Final Report, an original, plus an electronic copy in Adobe Acrobat (PDF) format on CD-ROM. We will also provide all databases and supporting documentation in electronic format.