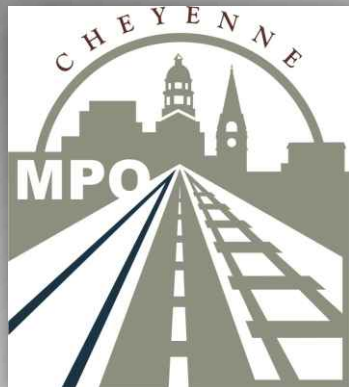


CTP Transit Development Plan *and* Coordination Study

Executive Summary

Prepared for



CTP Transit Development Plan and Coordination Study

Executive Summary

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Executive Summary



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INTRODUCTION

The Cheyenne Metropolitan Planning Organization (MPO) and the City of Cheyenne contracted with LSC Transportation Consultants, Inc. to prepare a Comprehensive Five-Year Transit Development Plan (TDP) and Coordination Study for the Cheyenne Transit Program (CTP), specifically focusing on the City of Cheyenne urban area. This summary report presents the results of the planning process over the past six months. This document covers the elements of Snapshot, Structure, Shape, and Build which were based on the Cheyenne Comprehensive Plan. This was done in order to allow the transit plan to integrate into the Cheyenne Comprehensive Plan.

The purpose of this report is to analyze and recommend strategies for responding to changes in the community which will affect the delivery of public transportation services over the next few years. The plan describes the existing conditions in the City of Cheyenne related to public transit services, discusses service and other alternatives for meeting transportation needs into the future, identifies the locally-preferred set of alternatives, identifies coordination strategies with human service transportation providers, and presents the implementation plan.

STUDY AREA

The City of Cheyenne is located in southeast Wyoming at the intersection of Interstates 25 and 80. Cheyenne is the state capital of Wyoming and the seat of Laramie County. Cheyenne is located approximately 90 miles north of Denver.

The geographic area of the Cheyenne Metropolitan Planning Organization is approximately 197 square miles. The populated portion of the area is small in comparison to the size of the MPO boundary. With the street network, people are able to travel between most points in 15 to 20 minutes or less. This presents a challenge to Cheyenne Transit when attracting choice riders to the transit system.

The 2006 population estimates presented in the next few pages indicate the Cheyenne metropolitan statistical area population is approximately 81,864. This is a four percent population increase from 2000.

TRANSIT NEEDS ASSESSMENT

In order to evaluate various service alternatives, it is important to have a methodology to estimate transit demand as a function of demographics, economics, and service characteristics. The following three models were used in the identification of the CTP transit service alternatives—Greatest Transit Needs Index Model, Fixed-Route Demand Model, and ADA Demand Estimation Model.

Greatest Transit Needs Index Model

Figure ES-1 presents Cheyenne study area’s US Census block groups with the greatest transit need, along with the transit needs index. Nine block groups were determined to have the greatest transit needs based on the zero-vehicle households, elderly population, disabled population, and below-poverty population. Table ES-1 presents information on these nine block groups. The greatest transit need is mainly in downtown Cheyenne, with a few areas of greatest transit need located north of US Highway 30.

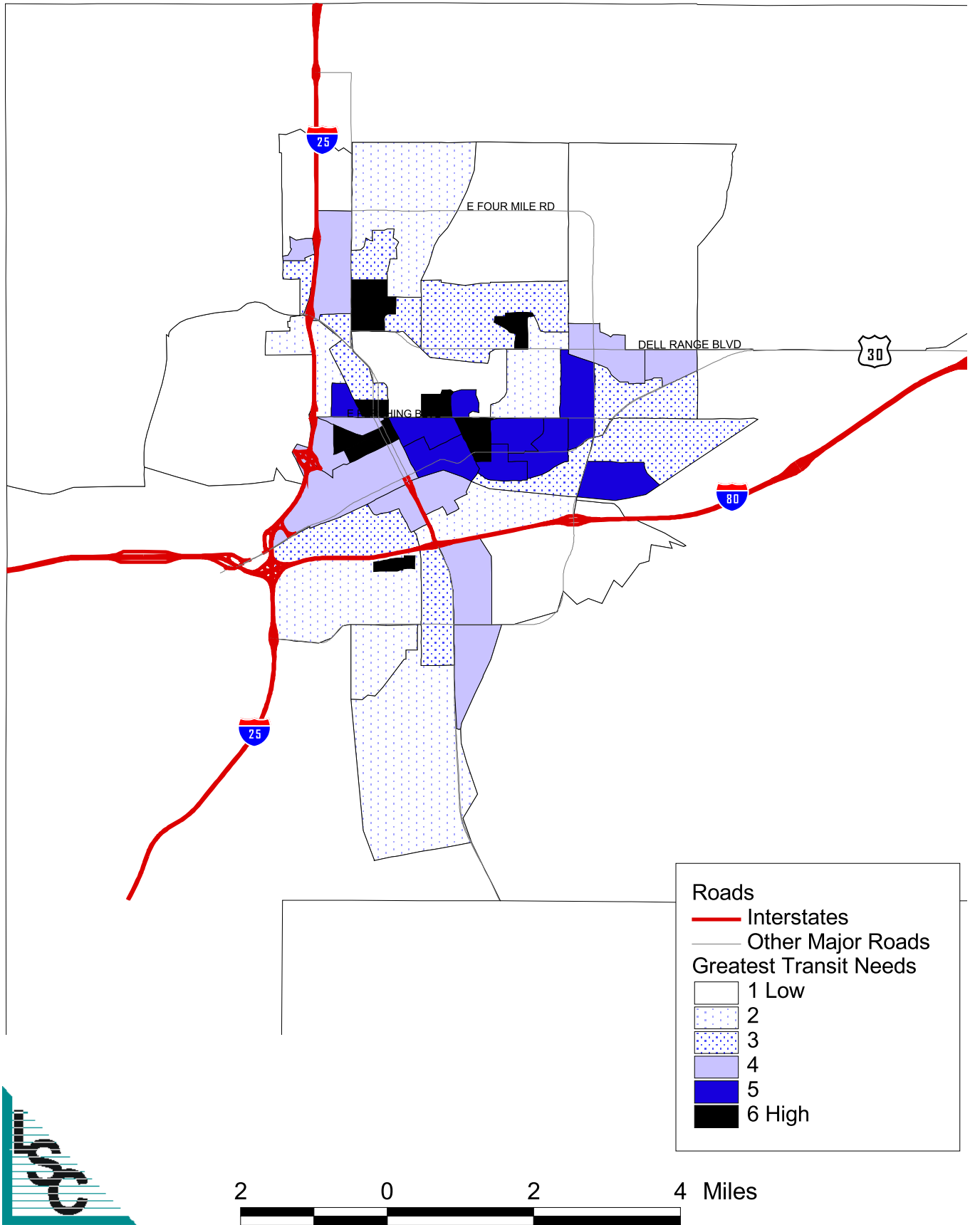
Census Tracts	Census Block Groups	Overall Score	Description
6	4	23	West of the United Medical Center East
10	1	23	North of Wyoming State Government offices
10	3	23	West of the Wyoming State Government offices
13	2	23	Yellowstone Surgery Center, LLC
14	2	23	East of Wal-Mart
3	1	22	South of Interstate 80
8	4	22	West of VA Hospital
9	3	22	South of Cheyenne Airport
10	4	21	Cheyenne Police Department

Source: LSC, 2007.

By identifying those areas with a high need for public transportation, LSC was able to uncover a pattern for the areas with the highest propensity to use the CTP tran-

sit service. As LSC examined the CTP transit service alternatives and the coordination of services, Figure ES-1 was used in the analysis to ensure that areas with a high transit need will be adequately served. Those US Census block groups not scoring in the highest category, but still having a high score, can still be considered a high priority for transit service.

Figure ES-1
Greatest Transit Needs



Fixed-Route Demand Model

In order to analyze whether the existing transit service is meeting the community's needs based on the type of service, LSC created a fixed-route demand model. The model format is based on household vehicle ownership, average walking distance to bus stops, and frequency of operation. The basic approach is described in the paper *Demand Estimating Model for Transit Route and System Planning in Small Urban Areas, Transportation Research Board, 730, 1979*. This model incorporates factors for walking distance, the distance traveled on the bus, and the frequency of service or headway.

The calibrated fixed-route model for CTP is presented in Table VII-3 of the final report. This model reflects the existing population based on the 2006 population estimates and the 2006 ridership. The headways were decreased from the 2002 TDP's 45-minute headway to the existing 60-minute headway. With the population increase in Cheyenne, the ridership has also increased. Therefore, the basic trip rates were slightly adjusted to reflect the actual level of ridership. As shown in Table VII-3 of the final report, the model generated 687 daily trips and approximately 214,000 annual trips, which is consistent with CTP current ridership. This model does not include those trips that will still need to ride the paratransit service due to the Federal Transit Administration (FTA) ADA requirements.

The percentage of households with transit access was determined by the number of households within one-quarter mile of the transit service. The US Census block groups located entirely within one-quarter mile show 100 percent transit access.

This fixed-route model was then used to estimate ridership for the alternate transit service alternatives, which were incorporated into the model by changing the percentage of households served by transit, walking distance, and frequency of service. The fixed-route model results for the transit service alternatives are detailed in the final report.

LSC also created an ideal fixed-route model based on several assumptions in order to create a basis for comparing the existing fixed-route service. The assumptions

included the headways, destinations of the route structure throughout the community, and access to the transit routes. Based on these assumptions, LSC generated the estimated demand for an ideal fixed-route service. LSC used 30-minute headways on all routes, an average walking distance to the route of 500 feet, and 100 percent of all households having access to transit. The model generated 2,126 daily trips and approximately 663,000 annual trips, as presented in Table VII-4 of the final report.

ADA Demand Estimation Model

LSC then prepared demand estimates for the demand-response ridership based on a methodology developed by the FTA. Factors used in this methodology included demographics, eligibility criteria, service area, availability of other services, socioeconomic characteristics, service characteristics, and fares.

Low and high demand estimates were produced with this methodology and are shown in Table VII-5 of the final report. The demand estimates were calculated by US Census block group and show the current demand for paratransit services in Cheyenne. The annual trips for the Cheyenne area's certified paratransit population ranges from approximately 21,768 to 47,890 annual trips, which is consistent with the CTP paratransit ridership of 23,722 passengers.

RECOMMENDED TRANSIT SERVICE PLAN

Chapter XIII of the final report reviews the details of the preferred transit service plan including the levels of service, operating costs, and capital needs. The preferred transit service plan will be developed in four phases, each of which will increase the level of service. The four phases were created in order to facilitate the coordination and development of transit service in the study area. In addition to the preferred transit service plan, LSC will work with the CTP and MPO staff to develop the short-range transit system and the route adjustments.

Coordination Plan

The coordination strategies recommended at this time for CTP and the study area are listed below. The strategies were based on input and Chapter XII of this docu-

ment. The first step in this coordination plan is to have CTP continue the effort of working with Stride.

LSC has developed the following coordination strategies:

- Develop a coordination council.
- Create a coalition of transportation stakeholders.
- Continue and expand contract service.
- Develop agreements that allow CTP to continue as the consolidated transit program.
- Improve transit service to the human service providers in the City of Cheyenne.

A coordination council or coalition will represent a step toward achieving coordinated transportation services within the study area. The coordination council or coalition should work with the human service providers to develop a basic understanding of the transit issues and how to work together cooperatively. Through this process, the area will be able to implement the other coordination strategies of contract services and centralized operational functions. The coordination meeting should be conducted or held every quarter. The coordination council or coalition will need to set up bylaws and an organizational structure in order to conduct productive meetings.

Many of these human service providers and other transportation providers have attended the coordination meetings held throughout this planning process. The strategies above will allow the connection and dialog that started in this planning process to continue. Appendix I presents the sign-in sheets for the coordination effort that was conducted in this planning process. The CTP and MPO staff requested that the coordination meetings be held in conjunction with the public meetings in order to create a more open planning process that allowed the public to be involved in all elements of development of the coordination plan.

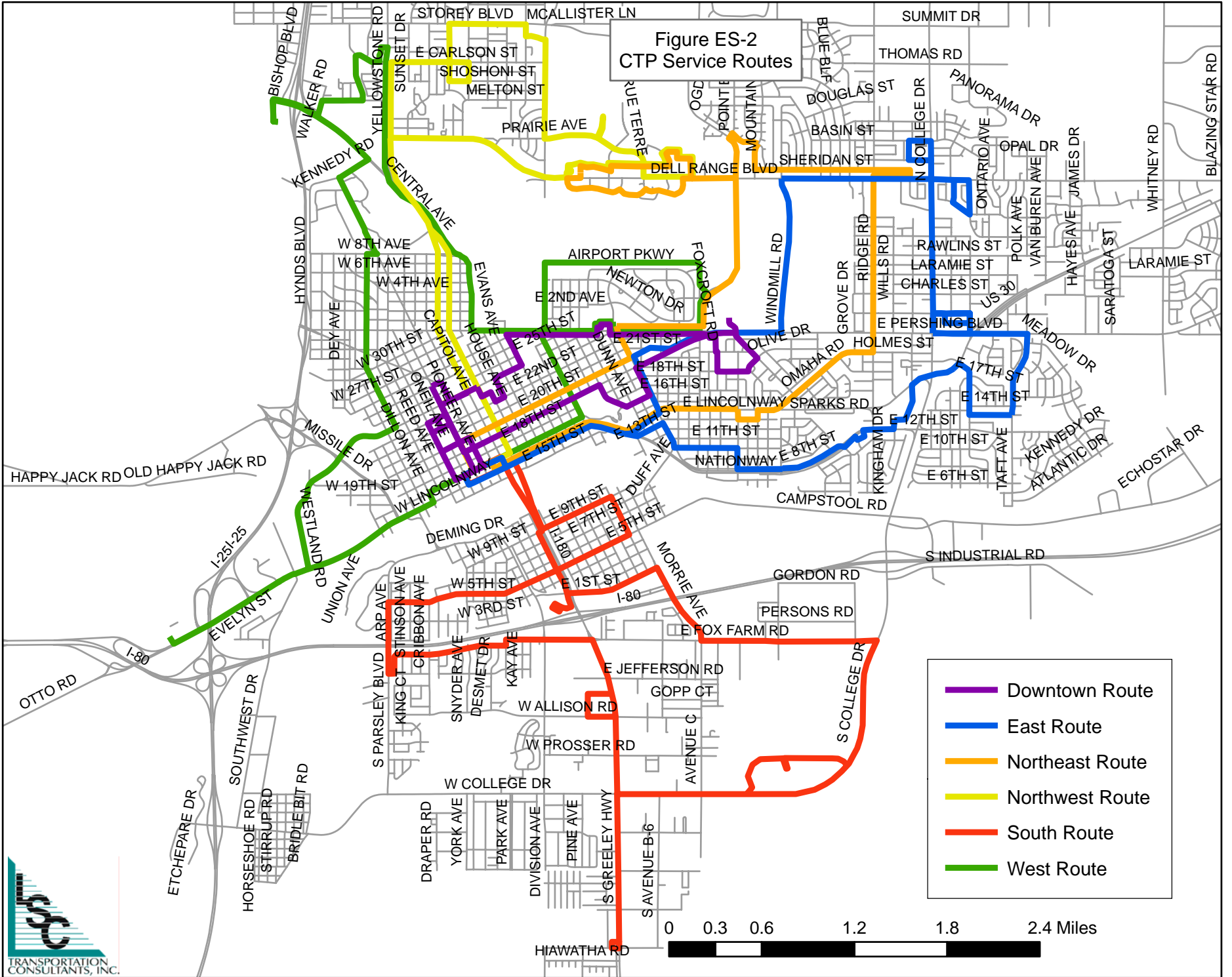
Short-Term Plan

After meeting with the CTP and MPO staff to review any possible route adjustments, the following short-term plan was developed. The elements of the short-

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term plan include purchasing and implementation of a computerized dispatching software, route adjustments, development of transit boarding areas, and adjustment of the fare structure. Figure ES-2 presents the CTP route service with the adjustments and the transit boarding areas.

Figure ES-2
CTP Service Routes



Mid-Term/Long-Term Plan

At the October 2007 and January 2008 meetings, the CTP and MPO staff agreed that Alternative I should be the preferred transit service plan. Alternative I is based on the existing service structure, but with deviated routes and one demand-response vehicle. This moves the fixed-route service to deviated routes and decreases the curb-to-curb service. LSC worked with the Stakeholders Committee and the bus drivers to develop the preferred transit service plan including the following adjustments to Alternative I: add phases to the implementation plan, adjust existing routes to improve route function, add bus stops, and add express routes in Phase IV.

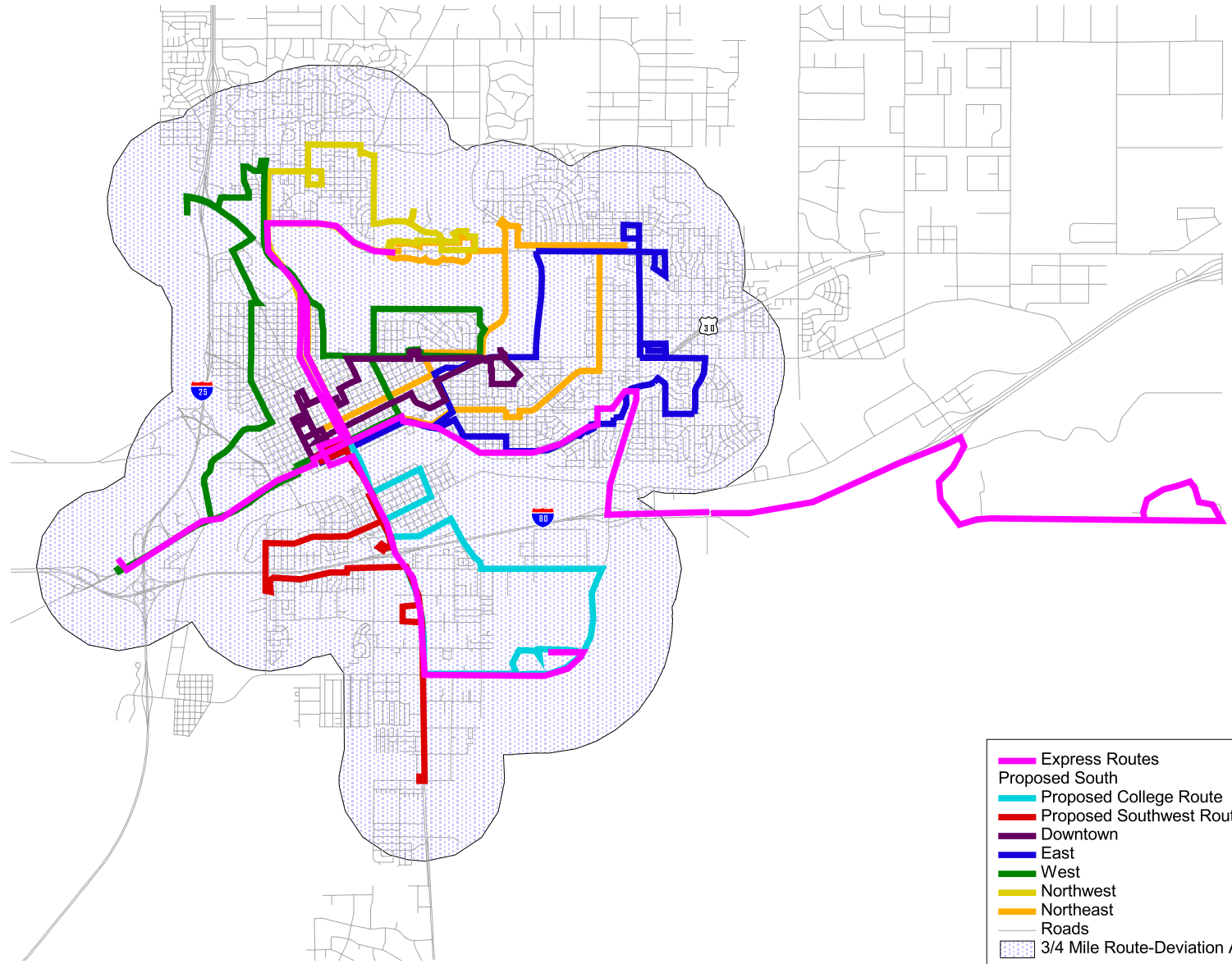
Phase I will include six routes based on the structure from the short-term plan. The Northwest and East routes will change to deviated service. The Downtown, Northeast, South, and West routes will provide fixed-route service. The curb-to-curb service will be reduced from 9,500 to 3,800 revenue-hours annually. The reduction of the curb-to-curb service allows those revenue-hours to be used to extend service from 6:00 to 10:00 p.m. on weekdays.

Phase II will include the same types of transit service as Phase I, but the route service will move to full deviation with a seventh route and Sunday demand-response service. Based on the information obtained throughout the planning process, there is a need for a second route to cover the southern portion of the community. The existing South route will be renamed the College route. All seven routes will be deviated routes. The curb-to-curb service will be reduced to 2,550 annual revenue-hours. The difference in revenue-hours will be shifted to create new demand-response service on Sundays.

Phase III will include the same types of transit service as Phase II, but will increase the level of service. The deviated-route service will decrease the headway on all seven routes from 60 minutes to 30 minutes for the peak hours. The remainder of the day, the deviated-route service will operate on 60-minute headways. The curb-to-curb service will be reduced to 2,040 annual revenue-hours.

Phase IV will include the same types of transit service as Phase III, but with increased level of service and the addition of express routes. The deviated routes will operate with decreased headways from 60 minutes to 30 minutes, for a total of 52,600 annual revenue-hours. The express routes (from Alternative III) will be included in Phase IV to increase the flexibility and mobility of the transit service, and allow CTP to service several major employment centers outside the existing transit service area. The route structure for Phase IV is presented on Figure ES-3.

Figure ES-3
Phase IV Preferred System



- Express Routes
- Proposed South
- Proposed College Route
- Proposed Southwest Route
- Downtown
- East
- West
- Northwest
- Northeast
- Roads
- 3/4 Mile Route-Deviation Area

2 0 2 Miles



FINANCIAL PLAN

The following section presents the proposed financial plan for the next six years for the existing transit service. This financial plan does not include the cost of the preferred transit service plan at this time. Table ES-2 presents the expenditures and revenues for CTP for 2009 through 2014, with the assumption of an annual five percent inflation rate.

LSC recommends that CTP continue to apply for federal and state grant funding in order to support public transportation services in the Cheyenne area. Federal funding is expected to remain relatively stable over the next few years. CTP should also continue to work toward establishing new revenue sources. Additional funds may be generated by pursuing grants from agencies and foundations, other than the Wyoming Department of Transportation (WYDOT) or FTA.

In the short term, LSC recommends that CTP apply for FTA 5307 and 5309, TANF, Medicaid, CDC, local, and senior center funding. Under the new SAFETEA-LU rules, both TANF and Medicaid funding can be used for the local match transit operations.

Federal funding is available for 50 percent of the operating costs for general public transportation services less farebox return. The remaining operating costs should be divided among the local government entities and local agencies depending on the intergovernmental agreements and contract services. LSC anticipates \$1.5 million in operational costs in fiscal year 2009 and \$1.57 in fiscal year 2010, with an increase in each of the following years based on implementation of the additional phases. With the computerized dispatching system, LSC assumes the cost of curb-to-curb service can be maintained with the rate of inflation.

**Table ES-2
Transit Plan, 2009-2014 (assumed 5% inflation)**

	2009	2010	2011	2012	2013	2014	Total
EXPENSES							
OPERATING							
Route Service	\$805,192	\$845,452	\$887,724	\$932,111	\$978,716	\$1,027,652	\$5,476,847
Curb-to-Curb Service	\$516,781	\$542,621	\$569,752	\$598,239	\$628,151	\$659,559	\$3,515,102
Stride Service	\$167,227	\$175,589	\$184,368	\$193,586	\$203,266	\$213,429	\$1,137,465
							\$0
Marketing Program / Public Education	\$10,000	\$10,500	\$11,025	\$11,576	\$12,155	\$12,763	\$68,019
Subtotal	\$1,499,201	\$1,574,161	\$1,652,869	\$1,735,512	\$1,822,288	\$1,913,402	\$10,197,433
CAPITAL							
Transit Buses	\$330,750	\$393,750	\$78,750	\$0	\$157,500	\$78,750	\$1,039,500
Transit Stop Improvements (60 stops over 6 years)	\$90,000	\$94,500	\$99,225	\$104,186	\$109,396	\$114,865	\$612,172
Office / Administration / Maintenance Eq./Radios	\$5,000	\$5,250	\$5,513	\$5,788	\$6,078	\$6,381	\$34,010
Subtotal	\$425,750	\$493,500	\$183,488	\$109,974	\$272,973	\$199,997	\$1,685,682
TOTAL EXPENSES	\$1,924,951	\$2,067,661	\$1,836,356	\$1,845,487	\$2,095,261	\$2,113,399	\$11,883,115
REVENUES							
Operation							
FTA 5307 Operational / State Grant Funding	\$744,600	\$781,830	\$820,922	\$861,968	\$905,066	\$950,320	\$5,064,707
State Grants	\$76,000	\$79,800	\$83,790	\$87,980	\$92,378	\$96,997	\$516,945
Subtotal	\$820,600	\$861,630	\$904,712	\$949,948	\$997,445	\$1,047,317	\$5,581,652
Capital							
FTA 5307 Capital	\$340,600	\$394,800	\$146,790	\$87,980	\$218,378	\$159,997	\$1,007,945
FTA 5309 Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$340,600	\$394,800	\$146,790	\$87,980	\$218,378	\$159,997	\$1,007,945
Local Revenues							
Operational (Local Match)	\$326,695	\$415,464	\$443,273	\$472,471	\$503,130	\$535,321	\$2,696,354
Capital (Local Match)	\$85,150	\$98,700	\$36,698	\$21,995	\$54,595	\$39,999	\$337,136
Intergovernmental Agreements	\$56,150	\$58,958	\$61,905	\$65,001	\$68,251	\$71,663	\$381,927
Advertising	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$108,000
Fares	\$277,755	\$279,066	\$286,884	\$295,094	\$303,713	\$312,764	\$1,755,276
Subtotal	\$763,750	\$870,188	\$846,760	\$872,560	\$947,688	\$977,748	\$5,278,694
TOTAL REVENUES	\$1,924,951	\$2,126,618	\$1,898,262	\$1,910,487	\$2,163,512	\$2,185,062	\$11,868,292

Source: LSC, 2008.