WCCTAC
West Contra Costa Transportation Advisory Committee

West Contra Costa High-Capacity Study

FINAL TECHNICAL MEMORANDUM #2

Goals and Objectives

September 2015

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With

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Document Version Control

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6/16/2015	Tam Tran	Parsons Brinckerhoff	Incorporated feedback from WCCTAC staff and Study Management Group
8/17/2015	Doris Lee	Parsons Brinckerhoff	Updated goals and objectives to reflect feedback from July 9, 2015 WCCTAC meeting
9/11/2015	Tam Tran	Parsons Brinckerhoff	Added "Consistency with local plans and policies" as objective for Goal 4. Inserted new study area map, slightly revised for Fact Sheet.

Document Sign-off

Name	Date	Signature
Rebecca Kohlstrand	9/15/15	
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Acronyms and Abbreviations

ABAG	Association of Bay Area Governments
AC Transit	Alameda-Contra Costa Transit District
BART	Bay Area Rapid Transit
BRT	bus rapid transit
CCTA	Contra Costa Transportation Authority
HCT	high-capacity transit
I-580	Interstate 580
I-80	Interstate 80
I-880	Interstate 880
I-980	Interstate 980
LRT	light rail transit
MTC	Metropolitan Transportation Commission
RTPC	Regional Transportation Planning Committee
WCCTA or WestCAT	Western Contra Costa Transit Authority
WCCTAC	West Contra Costa Transportation Advisory Committee

1 INTRODUCTION

The West Contra Costa Transportation Advisory Committee (WCCTAC) recognizes the need to strategically respond to increasing traffic congestion and address future transit demand in the West County sub-region. The Interstate 80 (I-80) corridor is the primary interregional commute corridor through western Contra Costa County and is regarded as one of the most congested corridors in the San Francisco Bay Area. Travelers from within Contra Costa County and neighboring areas use this stretch of I-80 in West County to access both local and regional destinations, including destinations in Alameda and San Francisco counties as well as the Peninsula and South Bay to Sacramento and beyond. Traffic is routinely congested during peak commute hours in both directions, as well as during off-peak hours and weekends. Preliminary estimates indicate that work trips on the I-80 corridor are expected to increase by approximately 23 percent by 2040.[1] Additionally, the University of California plans to develop its site at the Richmond Field Station adjacent to Interstate 580 (I-580).

In an effort to reduce congestion and plan for future growth, WCCTAC is conducting the West County High-Capacity Transit Study to analyze multimodal high-capacity transit options and the associated costs and funding opportunities for the corridor. High-capacity transit (HCT) provides substantially higher levels of passenger capacity with typically fewer stops, higher speeds and more frequent service than community-based or local public bus services. This Goals and Objectives Technical Memorandum for the West County HCT Study will guide the study's development and assessment of potential HCT investments.

1.1 Background

WCCTAC is one of four regional transportation planning committees (RTPC) in Contra Costa County. The agency is charged with assessing the transportation needs of the West Contra Costa region, coordinating the actions of its members, and making policy and funding decisions regarding transportation issues. WCCTAC is governed by a Joint Exercise of Powers Agreement between the following member agencies: the Cities of El Cerrito, Hercules, Pinole, Richmond, and San Pablo; Contra Costa County; and the transit providers Alameda-Contra Costa Transit District (AC Transit), Bay Area Rapid Transit (BART), and Western Contra Costa Transit Authority (WestCAT). This study supports WCCTAC's vision of providing leadership, vision, and public policy development to create a comprehensive and cohesive transportation program that responds to the communities' present and future needs.

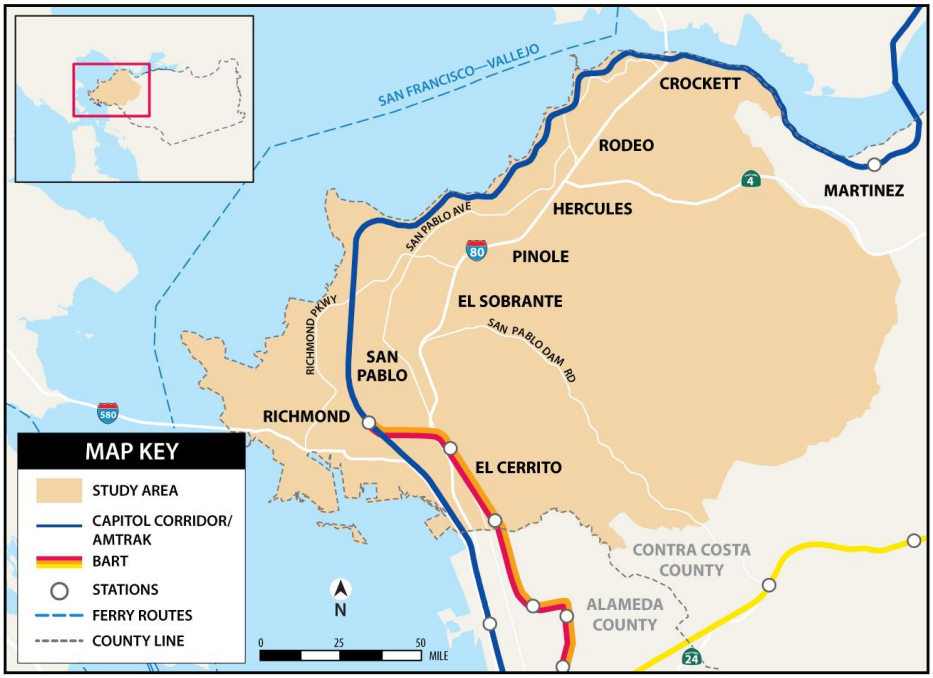
[1] Kittelson 2015, based on Contra Costa County Travel Demand Model

1.2 Study Area Context

West Contra Costa County is a distinctive sub-region within the Bay Area set between the San Francisco Bay and the East Bay hills. I-80, the primary vehicular route running north-south through this sub-region, has major regional significance to Bay Area commuters, and is considered one of the most congested freeway corridors in the region. San Pablo Avenue is a major arterial that runs parallel and functions as a possible alternative to I-80. It links each jurisdiction in West Contra Costa and is a key commercial thoroughfare for the sub-region. Interstate 580 (I-580), which runs perpendicular to I-80, connects travelers west to and from Marin County across the Richmond-San Rafael Bridge to I-80, and continues east through Alameda County and beyond.

The study area extends along the I-80 corridor, encompassing West Contra Costa County from the southern boundary at the Alameda County line north to the Carquinez Bridge and Solano County line. It essentially encompasses the Metropolitan Transportation Commission's (MTC) Superdistrict 20, which includes the Cities of El Cerrito, Hercules, Pinole, Richmond, and San Pablo as well as the unincorporated communities of Crockett, El Sobrante, and Rodeo. **Figure 1** displays a map of the core study area, which includes I-80 and I-580, Highway 4, as well as major surface streets including San Pablo Avenue and Richmond Parkway. The West County HCT Study will also include analysis of travel markets to the west of the study area along I-580, south along I-80 to Alameda County and the Bay Bridge, east along Highway 4, and north along I-80 across the Carquinez Bridge to Solano County.

Figure 1. Study Area



Source: Parsons Brinckerhoff, Kimley Horn, 2015

1.3 Study Purpose

The purpose of this study is to identify and evaluate the feasibility and effectiveness of HCT options in west Contra Costa County for WCCTAC's consideration. This will require understanding existing travel markets and future demand for HCT in the area as part of the larger regional transit network, identifying and evaluating HCT options, and assessing the costs and potential funding sources for these options. Central to the study purpose is providing WCCTAC with the analyses necessary to determine and advance the most promising HCT alternative(s). The study will consider multimodal transit options including, but not limited to: freeway-based express bus, bus rapid transit (BRT), light rail transit (LRT), extension of BART service, commuter rail improvements, and ferry service. Study findings will guide future planning, investment priorities and funding efforts for WCCTAC.

1.4 The Need for High-Capacity Transit Improvements

Within west Contra Costa, the I-80 corridor is routinely congested during peak commute hours, often in both directions, with the AM southbound (also known as the westbound) direction being the more primary commute. Severe congestion is also present during off-peak hours and weekends. While some trips originate or terminate within west Contra Costa County, much of the traffic results from trips to and from destinations outside the sub-county region that are just passing through (WCCTAC, 2014). High traffic volumes and congestion within the area restricts mobility for local residents, negatively impacts goods movement and commercial enterprises, and contributes to local pollution and greenhouse gas emissions.

HCT improvements in West County are needed to address increasingly unreliable travel times for transit trips made on the area's congested roadways and insufficient transit capacity to meet the demands of current and future travel within and through the area. Existing transit in West County, including AC Transit, WestCat and BART, is heavily utilized but directly serves a limited number of local residents and workplaces. Extending the reach of HCT would increase the number of regional travel options for West County and beyond.

2 GOALS AND OBJECTIVES

The goals and objectives of this study are informed by a review of relevant past studies, West County and countywide transportation goals and the need to address existing and future transportation problems. A multitude of studies were conducted in the past 20 years in an effort to address increasing congestion on the I-80 corridor. These studies include MTC's I-80 Corridor Study (1996) and Regional Rail Plan (2007), several studies from BART exploring extensions in West Contra Costa County, as well as other studies from WCCTAC, CCTA and countywide transit providers. These studies have consistent themes in highlighting the need to improve mobility in the corridor through convenient and reliable transit service, provide

alternatives to single-occupancy vehicles, encourage sustainable transit-oriented development, and reduce environmental impacts with respect to maintaining the quality of life in local communities.

In addition to past studies relevant to the I-80 corridor, a review of long-range plans, action plans, and vision plans from regional authorities was conducted to inform and establish a level of consistency when defining the goals and objectives specific to this study. Among these was the West County Action Plan for Routes of Regional Significance, which identifies ten overarching goals that guide West County's transportation planning efforts.[2] One of these goals is to improve and expand high-capacity transit, a long-standing policy goal of WCCTAC that provides the groundwork for the West County HCT study.

Also important in the formation of this study's goals and objectives were the vision and goals set out in Contra Costa Transportation Authority's (CCTA) 2014 Comprehensive Transportation Plan. Part of the vision includes the integration of all modes of transportation to meet the diverse needs of Contra Costa. CCTA's goals to realize this vision include supporting the efficient, safe, and reliable movement of people and goods using all available travel modes and expanding safe, convenient and affordable alternatives to the single-occupant vehicle.

The goals and objectives specific to this study are outlined as follows:

Goal 1: Increase transit ridership by providing efficient, frequent, and reliable service

- Objective 1a: Improve high-capacity transit service, travel times, and connections.
- Objective 1b: Improve access to existing and proposed transit hubs by all modes of transportation and increase the total number of trips taken by transit.

Goal 2: Improve connections between transit systems and services

- Objective 2a: Connect communities in the corridor to the regional transit network and other regional centers.
- Objective2b: Provide user-friendly connections between regional and local transit services.

Goal 3: Expand transit in competitive corridors to new and underserved travel markets

- Objective 3a: Identify opportunities to match transit improvements with unmet and anticipated future needs in local, regional, and inter-regional markets.

Goal 4: Protect and enhance the environment and maintain a high quality of life

- Objective 4a: Avoid impacts to existing natural and cultural resources in the corridor.

[2] West County Action Plan for Routes of Regional Significance, WCCTAC, 2014.

- Objective 4b: Improve air quality and decrease greenhouse gas emissions by reducing reliance on single-occupant vehicles.
- Objective 4c: Reduce transportation energy demand (per vehicle mile of travel) by increasing the use of high-capacity transit.
- Objective 4d: Take into account risks related to sea level rise and the effects of climate change in the location and design of transit facilities.
- Objective 4e: Be consistent with local plans and policies.

Goal 5: Support sustainable urban growth

- Objective 5a: Support economic and transit-oriented development in the corridor to advance the regional Sustainable Communities Strategies and Priority Development Area policies that support them.
- Objective 5b: Support development of compact, mixed-use, and sustainable communities that can be served effectively by transit.

Goal 6: Provide equitable access for residents and businesses

- Objective 6a: Improve transit access to jobs, housing, education, and other regional resources for a broad cross-section of socio-economic groups, ethnicities, and household types, especially for transit-dependent populations.
- Objective 6b: Preserve mobility of people and goods throughout the corridor.

Goal 7: Make efficient use of public financial resources

- Objective 7a: Identify high-capacity transit investments that are cost-effective.
- Objective 7b: Seek public input on proposed transit investments.

These goals and objectives will serve as the framework for the study's development and evaluation of long-term HCT improvements.