



WEST DAVIS  
CORRIDOR

# Technical Memorandum 21 – No-Action Alternative and Land Use Assumption Methodology

---

in support of the  
Environmental Impact Statement

## West Davis Corridor Project

Federal Highway Administration  
Utah Department of Transportation



April 2017





## 1.0 Introduction

The purpose of this technical memorandum is to document the No-Action Alternative used in the West Davis Corridor (WDC) Environmental Impact Statement (EIS) to evaluate impacts to the natural and built environment. The WDC Project is proposed in western Davis and Weber Counties, which are expected to have substantial growth in population and households through 2040 (the WDC design year). This growth is expected to occur at similar levels with either the WDC No-Action or action alternatives. The basis for this assumption is explained below.

## 2.0 Population and Land-Use Projections for 2040

### 2.1 Population Growth through 2040

The Utah Population Estimates Committee (UPEC) developed the official 2040 population and housing estimates for Utah and the 29 counties in the state. Coordination and staffing the committee was the responsibility of the Demographic and Economic Analysis Section of Governor's Office of Management and Budget (GOMB). Membership included representatives from state government, universities, and other organizations with knowledge of the data used in making population estimates..

GOMB uses the Regional Economic Models Inc. (REMI) model to estimate employment at the county level. The advantages of the REMI model are that the model has been tested and documented nationally, the results are similar to past Utah GOMB projections which have been shown to be accurate, and the model is customizable. The model is structured to capture all inter-industry linkages, is calibrated and estimated using national and regional data, is dynamic and predicts when results will occur, and is the leading policy analysis model in the United States.

The GOMB projections are then used by the Wasatch Front Regional Council (WFRC) in their planning and travel demand modeling efforts for the Regional Transportation Plan (RTP). In addition, the population projections inform the planning processes of state and local governments as well as private entities. Thus, the population, housing, and employment projections are expected to occur irrespective of specific transportation projects.

The following other important facts from the 2008 Baseline Report (GOMB 2008) show that growth will occur in Utah independent of major transportation facilities:

- **Utah's population will continue to increase.** The population in Utah is projected to increase from 2.70 million people to 6.84 million people in 2060, or 1 additional person every 6 minutes.
- **Utah's population will grow at 1.9% per year through 2060.** The current and projected rates of population growth, which are approximately twice the national average, are not unprecedented in terms of Utah's recent history, nor are they unique among the Intermountain states. Utah's historical rate of population growth from

1950 to 2000 averaged 2.4% per year. The projected rate from 2000 to 2060 is 1.9% per year.

- **At the current density of development, 900 square miles of new development are needed to keep up with growth.** Given a current estimate of over 796,650 acres of developed land in the state (including commercial), the report estimated that there are an average of 3.2 people per developed acre. At that rate, 575,000 acres, or nearly 900 square miles of new land, would need to be developed to keep up with population projections for 2030.
- **The current trend will increase developed land in Utah by 75% by 2030.** This rate of development would increase the amount of land developed in the state by nearly 75%.

## 2.2 Land-Use Projections from City Planners

Within the WDC study area, growth is already occurring at a rapid rate. New subdivisions are replacing agricultural land in northwestern Davis County and western Weber County, which is the only remaining land available. The continued growth of new homes in the study area is shown in Table 1 below. As shown even without the WDC, new single family housing construction continues at a rapid pace.

**Table 1. Building Permits in the WDC Study Area**

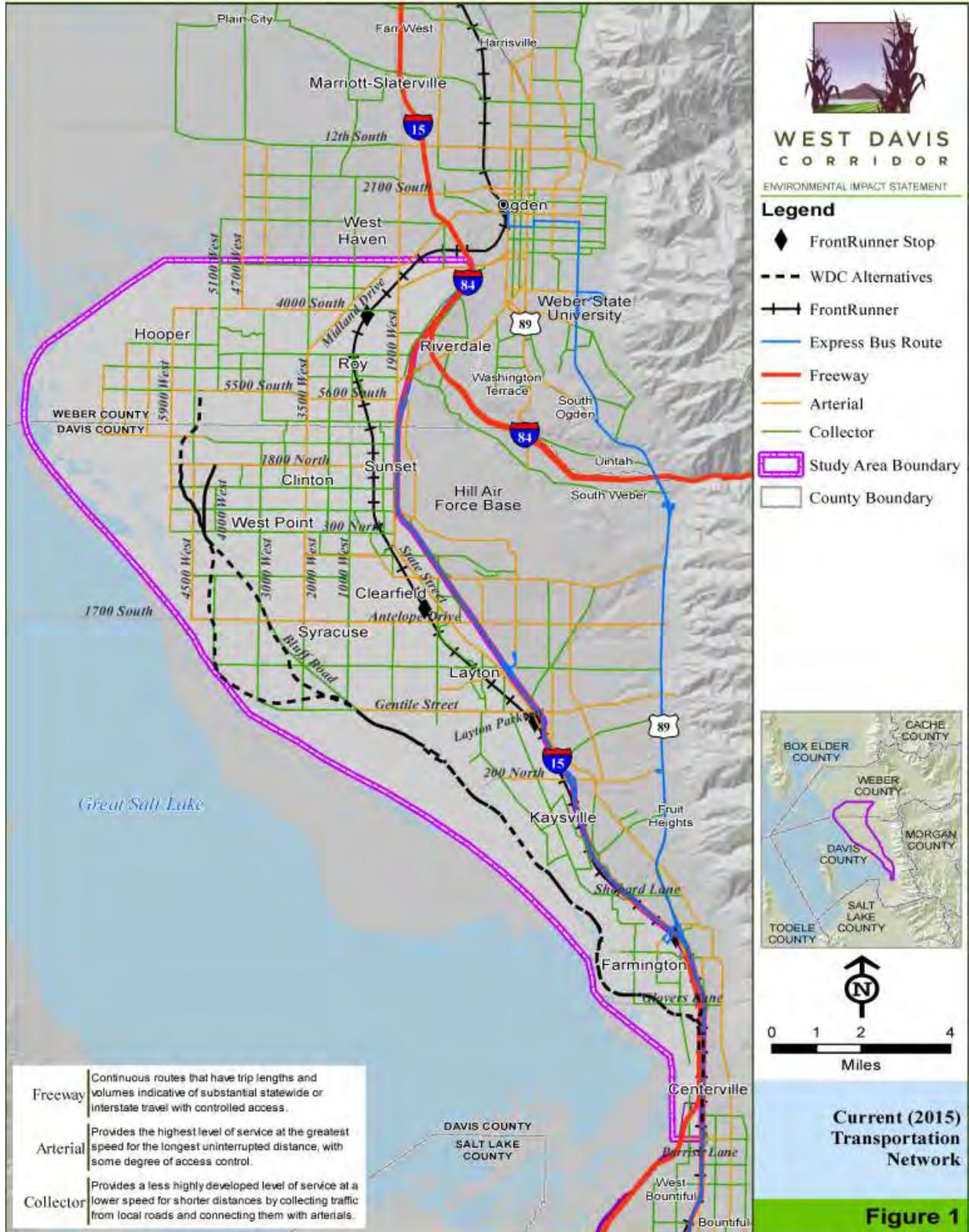
Housing Type	2010	2011	2012	2013	2014	2015	2016
Single-family permits	871	671	1,065	1,104	954	1,197	1,375
Multi-family permits (# of units)	14 (70)	14 (388)	34 (487)	30 (168)	37(256)	54(245)	57(674)
Total permits (# of units)	885 (941)	685 (1,059)	1,099 (1,552)	1,134 (1,272)	981 (1,210)	1,251 (1,442)	1,432 (2,094)

One of the main reasons development is occurring rapidly in the WDC study area is the existing transportation network. As shown in the Figure 1, Current (2015) Transportation Network, the study area has an extensive network of arterial, collector, and local roads. Based on this existing road network, future population projections, and some available undeveloped land in northwestern Davis County and western Weber County, city planners expect growth to continue at a similar pace on the remaining undeveloped parcels, even without the WDC (West Davis Corridor Team 2012). The WDC is not providing new access but reducing congestion levels on east-west arterials and I-15.

On March 14, 2012, the WDC team interviewed officials from Weber County and the Cities of West Haven, Hooper, Clinton, West Point, Syracuse, Layton, Kaysville, and Farmington. These interviews yielded information about planned land-development projects, reasonably foreseeable development patterns, the potential effect of transportation planning decisions on types of development, and the degree to which future development and real estate investment decisions were related to the WDC. These officials were asked how the land within their



respective cities would develop differently with the No-Action Alternative compared to the action alternatives.



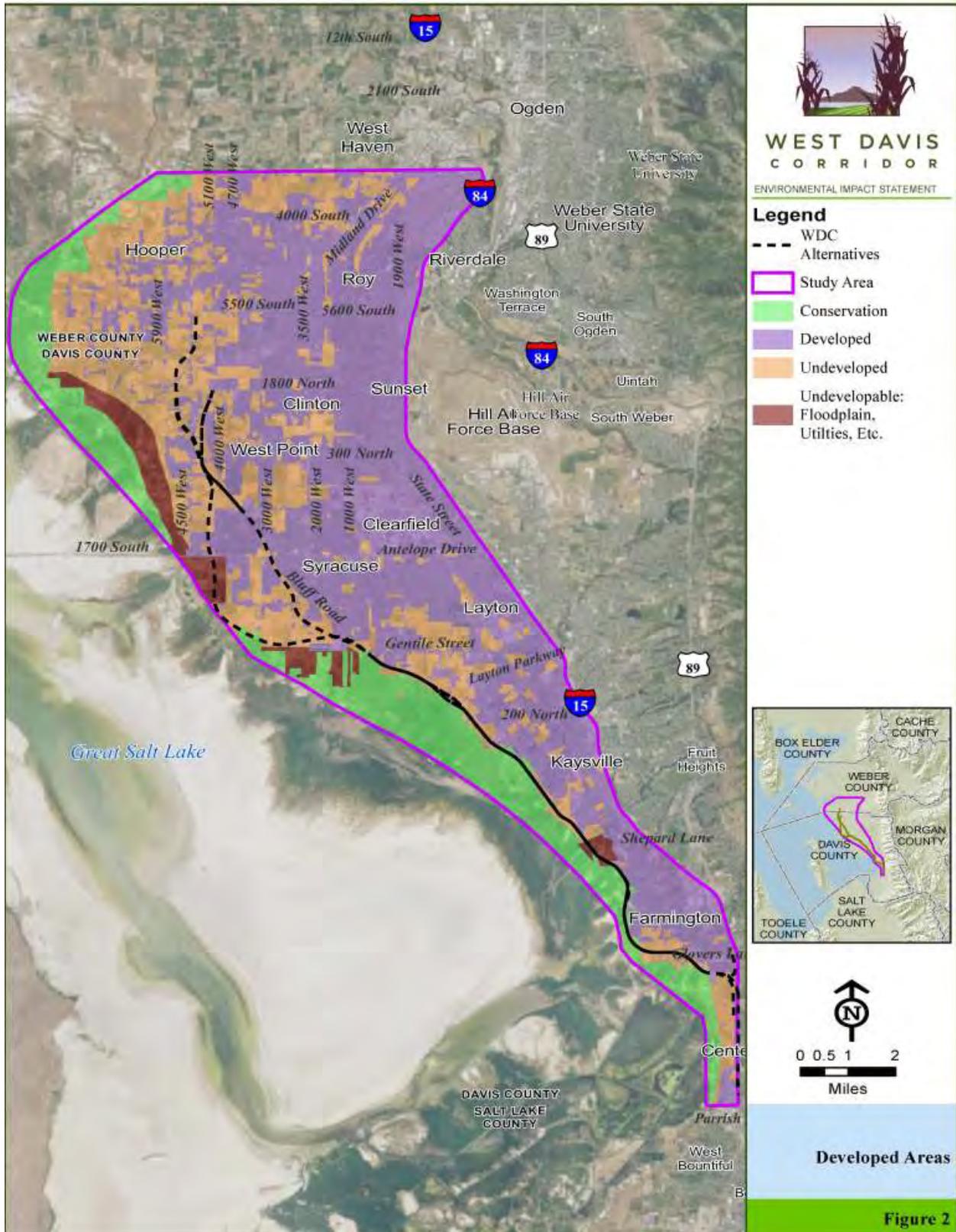
All of the officials except for those from West Point felt that the cities would grow at a similar pace with or without the WDC. The West Point planners estimated that the total development in West Point would be around 65% to 70% of build-out in 2040 with the WDC, which is about 5% to 10% more with the WDC than without it. However, even with this slight difference in growth in one city, the study area is still projected to develop with or without the WDC based on the GOMB growth and land-use projections.

Another key factor to support that land use will be similar with or without WDC is that much of the study area is outside of the far western portions of northern Davis County and western Weber County area already developed. As shown in Figure 2 below, between Farmington and Layton much of the land is developed and thus WDC would not change the growth in this area. This is also the case in Syracuse where development has occurred because of the access provided by the existing transportation network and affordable home prices. In fact, between the Draft and Final EIS several new large developments have been built or are in the process of being built.

The available land in Layton is being developed at a fast pace based on the expansion of the Layton Parkway and the location of the city near Salt Lake City and the I-15 corridor. As Layton is the next city north of the already developed Kaysville and Farmington it is expected that any available land will develop with or without the WDC.

West Point is also expanding as demonstrated by a new shopping center at the corner of 2000 West and 300 North. The expansion in West Point is a function of the recently improved S.R. 193 which has been expanded from two to four-lanes to 2000 West and is in the process of being extended to 3000 West. This road provides access into the main part of West Point.

The above demonstrates that development is already occurring in the WDC study area without the WDC project. Based on input from city planners, this growth in undeveloped parcels would continue at a similar pace even if WDC is not built. The assumption that growth would be essentially the same with or without the WDC project is further supported by a real estate market analysis (see 2015 Market Study) and a real estate market model use to consider how land use would be different with or without the project (see Real Estate Market Model).



Price is also a key factor in future development. Because of the distance from urban centers, the land in the WDC study area is less expensive than that in Salt Lake City or Ogden. New homes are listed for under \$200,000 in parts of the study area. In 2016, the median home price was between \$188,000 and \$377,000 in the study area. The lowest median price was in West Haven, which is one of the least-developed cities in the northwest end of the study area, and the highest median price was in Farmington, which is the most-developed city in the study area and the one closest to Salt Lake City.

### **3.0 2015 Market Study**

As part of the analysis of the proposed Shared Solution Alternative, a market-based evaluation of development in the WDC study area (RCLCO 2015) was conducted to verify future growth patterns. The evaluation looked at the potential for residential, commercial, and industrial development that would likely occur by 2040 based on market factors. The evaluation report concluded the following.

It is important to add, finally, that this suggests, as well, that construction of the West Davis Corridor would likely have little impact on broad development trends within west Davis and Weber Counties. Evidence in the Wasatch Front and elsewhere suggests that low density single-family development likely occurs whether or not the transportation improvements are there to accommodate it, unless more powerful forces (the land runs out, the government steps in, or the economy collapses) constrain development. (RCLCO 2015)

The evaluation report states that the inexpensive land in the WDC study area will be used to meet the strong demand for single-family homes and that the WDC is unlikely to change development patterns substantially, but could facilitate more-ordered development of the area. Therefore, the market-based evaluation further supports the conclusion that the WDC study area would develop with or without the WDC.

### **4.0 Real Estate Market Model (REMM)**

To test the assumption of a single forecasted land use for the WDC and No-Action Alternatives, UDOT was able to take advantage of WFRC's brand new Real Estate Market Model (REMM). Even prior to the adoption of the RTP in 2015, WFRC has been working on the REMM model to be able to account for how transportation infrastructure affects land use over time. This model would assist in understanding land development and transportation as related systems, rather than assuming that development decisions will be static regardless of how investments in transportation are made. Although still not an official part of the current RTP, WFRC has recently reached the point in the development of this model to be able to employ it on other major transportation studies, and intends to use it in development of the 2019 RTP. UDOT requested that WFRC run the REMM model for the No-action and action alternatives to see what affect, if any, the WDC would have on housing and employment in 2040. As shown in Table 2, the modeling results showed that total household growth would

increase less than 1% with the WDC action alternatives compared to the No-Action Alternative, and employment would decrease by less than 2% with the WDC action alternatives. The model results further support the conclusion that the WDC study area would develop at a similar rate with or without the WDC and that land uses would be similar with or without the WDC.

**Table 1. REMM Results**

	2040 Household				2040 Employment			
	Original WFRC Model	No- Action	WDC	WDC vs. No- Action	Original WFRC Model	No- Action	WDC	WDC vs. No- Action
WDC study area	90,436	90,114	90,645	+531	85,494	84,033	83,097	-1,461

## 5.0 Conclusion

The WDC study area is projected to experience future growth in undeveloped areas in northwestern Davis County and in western Weber County. The GOMB population projections (which are not based on future transportation projects) show that growth in the study area will continue between 2005 and 2040 and that this growth will occur on the remaining available agricultural land in the study area. City planners and recent building permit data indicate that the growth in northwestern Davis County and in western Weber County would occur at a similar pace with or without the WDC. A market-based real estate study noted that growth will likely continue independent of WDC due primarily to the low cost of land and housing. This is further supported by a REMM analysis performed by WFRC which showed little difference in No-Action and WDC 2040 land uses. Therefore, the WDC team expects that future growth will occur at a similar rate with similar land uses with or without the WDC which supports the use of a single land use assumption in the EIS.



## 6.0 References

[GOPB] Utah Governor's Office of Planning and Budget, State and Local Planning Section

2008 2008 Baseline Report: Current Conditions, Trends, and Projections.

2010 Population Estimates for Utah Methods Documentation. April.

[RCLCO] Robert Charles Lesser & Co.

2015 Market-Based Evaluation of Shared Solution Alternative Land Use Plan, Davis and Weber Counties, Utah. March.

West Davis Corridor Team

2012 Minutes from a meeting with the West Davis Corridor Team and planning officials from the Cities of West Haven, Hooper, Clinton, West Point, Syracuse, Layton, Kaysville, and Farmington. March 14.

[WFRM] Wasatch Front Regional Council

2017 Real Estate Market Model (REMM) results comparing 2040 West Davis Corridor Project household and employment projections to No-Build projections. February.