

# Glenwood Project Travel Model Analysis Summary

## Overview and Disclaimer

COMPASS was asked to conduct a special model run to analyze transportation impacts of potential redevelopment of the Ada County Fairgrounds east of Glenwood St (SH-44), north of Chinden Blvd (US-20/26), and south of the Boise River.

All analyses within this document are exploratory and not intended to represent official plans or intentions of the associated transportation and land-use jurisdictions.

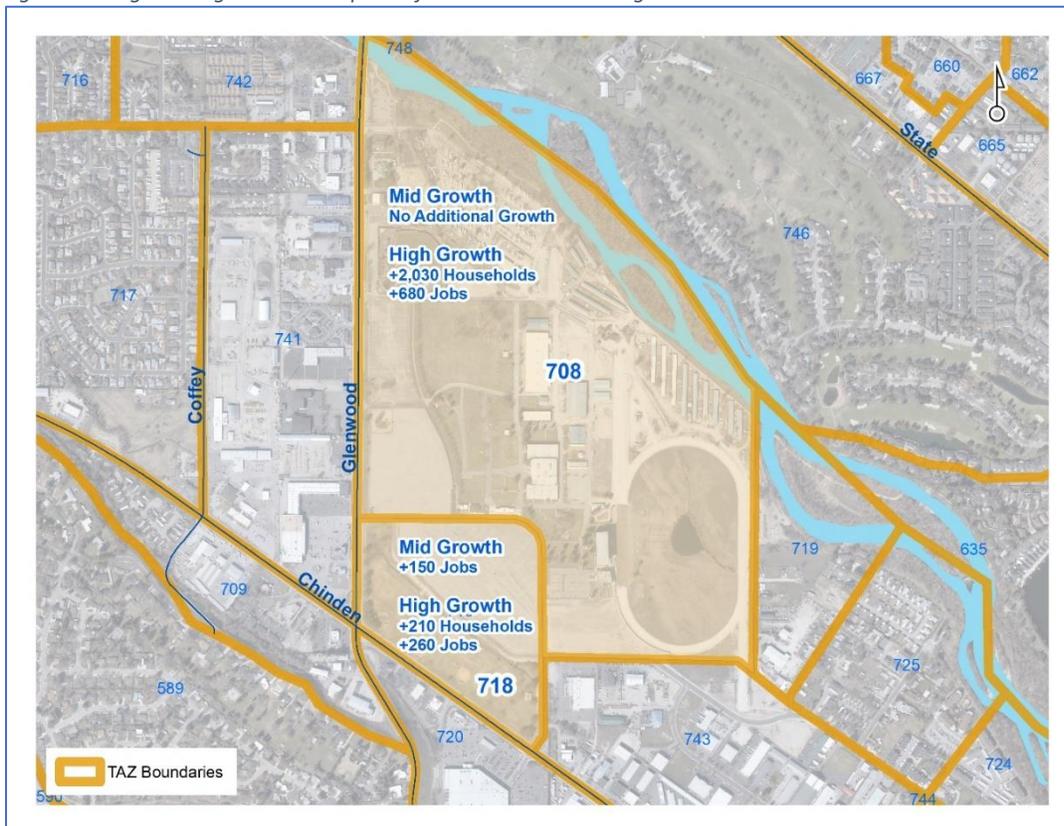
## Summary of Analysis

The following three scenarios were analyzed using the COMPASS Regional Travel Demand Model:

- *Mid Growth Scenario*: Conceptual demographic assumptions include 570 additional households and 175 additional jobs in the existing fairgrounds area and surrounding areas by year 2030.
- *High Growth Scenario*: Conceptual demographic assumptions include 3,290 additional households and 1,085 additional jobs in the existing fairgrounds area and surrounding areas by year 2040.
- *High Growth Scenario with Glenwood Widened*: Same demographic assumptions as above with Glenwood assumed to be a 7-lane street section (one additional travel lane in each direction) to evaluate potential *changes in demand and routes* (see below for more information).

Growth assumptions for fairgrounds transportation analysis zones (TAZs) are summarized in **Figure 1**.

Figure 1: Fairgrounds growth assumptions for Mid Growth and High Growth Scenarios



Conceptual demographic growth estimates in each scenario are in addition to official 2040 COMPASS demographics.

### *Existing Conditions*

The Glenwood St corridor currently carries nearly 40,000 vehicles per day and nearly 2,000 vehicles northbound in the PM Peak Hour (based on 2021 Automatic Traffic Recorder averages). It experiences congestion under current conditions, especially during peak periods. Based on INRIX probe-based travel data, average northbound PM-peak travel speeds in 2019 were approximately 35% lower than uncongested travel speeds. This equates to a travel time increase of roughly 2 minutes from Chinden Blvd (US-20/26) to State Street (SH-44), an approximate distance of 1.3 miles. It takes less than 3 minutes with little to no congestion and near 5 minutes during peak congestion.

### *Latent Demand Review*

The third scenario was completed for modeling purposes only – there are no known plans in place to widen Glenwood St. Adding additional lane capacity to a congested segment in the model can help evaluate *latent demand*. *Latent demand* can be likened to placing a small cup at the bottom of a full bathtub. The cup fills quickly with water that arrives first. The rest of the water cannot go into the cup because the cup simply cannot accommodate it. The travel demand model is based on the shortest path in terms of time from origins to destinations. As a road, like Glenwood St, becomes congested, trips that would have otherwise used a road along their shortest path start to find other parallel or even out-of-direction routes because a road can no longer accommodate the trip as well as another route.

### *Access and Local Road Assumptions*

Additional local roads were added to the model networks for circulation. With Glenwood St being a state highway, local connections are assumed to have limited access and were coded as right-in-right-out. One full access connection was aligned with Marigold St where a signalized intersection exists today. Access and local road assumptions are shown in the **Results of Analysis** section below.

### *Results of Analysis*

Forecasted travel demand is summarized for each scenario in **Figure 2**, **Figure 3**, and **Figure 4**. The percent change plots compare the scenario demand to the official model demand for the corresponding year. The maps below also show the geographic distribution of demographic assumptions.

Figure 2: Summary of 2030 Mid-Growth Scenario

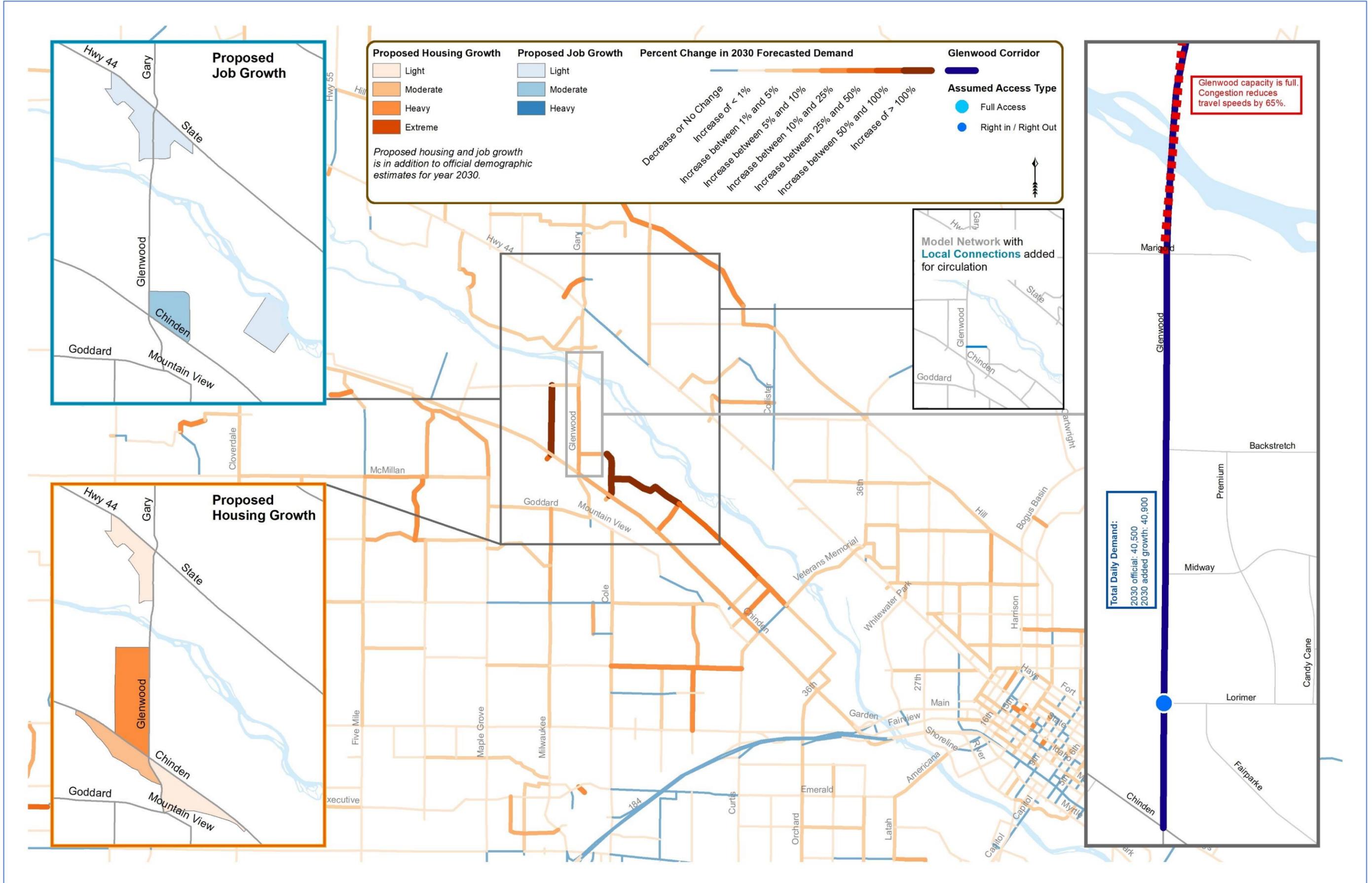


Figure 3: Summary of 2040 High-Growth Scenario

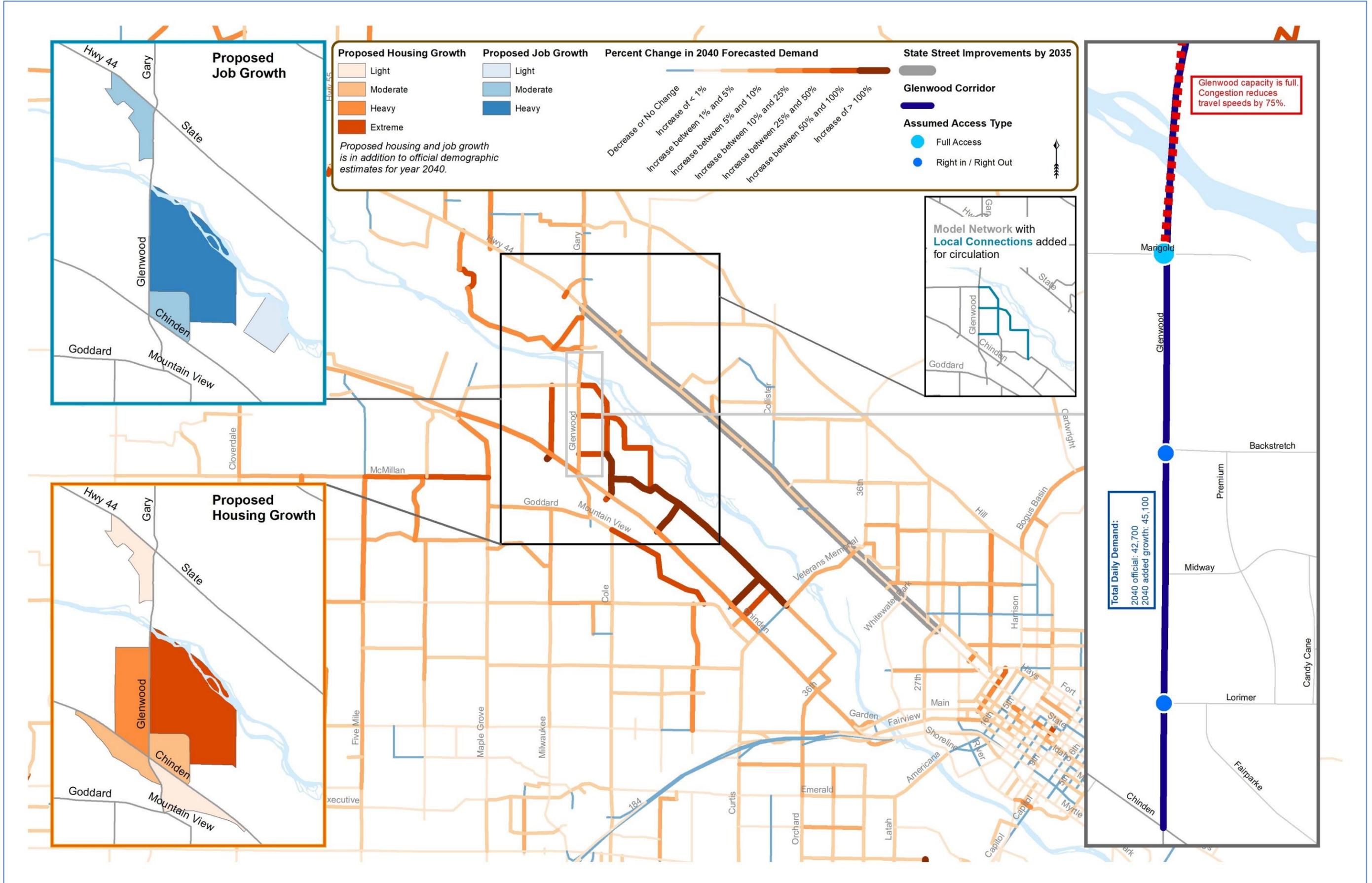


Figure 4: Summary of 2040 High-Growth Scenario with Glenwood as a 7-lane Street Section

