Forecast Archive Annotated Outline
(Silver Standard)

1 Introduction

This report, written in <month-year>, documents the traffic forecasts and supporting assumptions for the <project name>. The information in this report will be the primary source of information used to record the accuracy of the traffic forecast(s) and determine whether the assumptions used as a basis for the forecast also were generally accurate.

Section 2 describes the project. Section 3 summarizes the project traffic forecasts. Section 4 describes the forecasting method used to develop the traffic forecasts in Section 3. Section 5 enumerates the common and project-specific assumptions. Section 6 describes the data collection plan that will be executed prior to the post-construction forecast analysis. Section 7 provides a list of data sources and references used to develop the forecast.

2 Project Description

<Name of the project> is a <type of project [capacity addition, reconstruction, etc.]> located in <city, state>. Traffic forecasts for the project were prepared in <YYYY> for the <YYYY>, <YYYY>, and <YYYY> forecast year(s) for <agency name>. The project is currently planned to open in <YYYY>. The internal agency tracking number(s) for planning, design and construction phases is <NNNNNNNNN>.

<Include a 1–2 sentence description of the purpose of the project and the need for the traffic forecast>.

The study area boundaries are <here>, <here>, <here>, and <here>. A summary of the project scope goes here.

Describe any unique characteristics of the project. Some examples include: first project of its type in the region, first project of its type in decades, and exceptional project length, construction period and/or cost.

Describe the travel markets that are expected to comprise the majority of demand on the project. Travel markets are significant quantities of trips that traverse from one geographic area to another. They are typically further characterized by common trip purposes, time periods, line-haul or circulation/distribution movements, or socioeconomic variables. Examples of travel markets include: suburb-to-CBD work trips, external-external trips, game day traffic, and local shopping trips.

<Include a map.>

3 Description of Traffic Forecasts

Traffic forecasts were made for <NN> links in the study area. Unless mentioned otherwise, traffic forecasts discussed here are expressed in annual average daily traffic (AADT)/AM peak hour/other units.

The base year is <YYYY>. The most recent year traffic counts are available in the project area is <YYYY>.

Forecasts were developed for the <YYYY> (opening), <YYYY> (interim), and <YYYY> (design) years.

<Describe generally how the traffic forecasts were produced (e.g., model outputs only, post-processed model outputs, traffic counts with growth rate [define growth rate], etc.).>

<If existing reports document the traffic forecasting methods, please include them in the appendix and reference them in this section.>

Table III-B-1. Traffic forecasts.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Segment #** | **Project Segment and Direction** | **Time of Day** | **Most Recent Traffic Count (Year)** | **Base-Year Estimate** | **Opening-Year Forecast** | **Interim Year Forecast** | **Design-Year Forecast** |
| 1 |  | AM Peak Hour | <C,CCC> | <N,NNN> | <N,NNN> | <N,NNN> | <N,NNN> |
| 1 |  | PM Peak Hour | <C,CCC> | <N,NNN> | <N,NNN> | <N,NNN> | <N,NNN> |
| 1 |  | ADT | <C,CCC> | <N,NNN> | <N,NNN> | <N,NNN> | <N,NNN> |
| 2 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| Etc. |  |  |  |  |  |  |  |

Here is an overall assessment of the forecasts and how they compare to recent or existing traffic counts.

Describe the uncertainty windows—the range of forecasts—for the project using the quantile regression models developed by NCHRP Project 08-110.

4 Forecasting Methods

This section describes the methods used to develop the traffic forecasts. Common methods include: traffic count trend projections, population growth rate forecasts, and travel models. If standardized methods are used, refer to the type and version and reference already-available documentation. Also enclose this documentation in Section 7.

Describe the items (various types and pieces of information) used to describe the project and create the forecast using the chosen method. Items typically include: general understanding of current demand, travel times, and the travel markets expected to use the project. Additional items could include how well the model is expected to capture details about the expected changes, including the project itself in terms of overall demand, travel markets, and travel times.

Identify any important items for which the method does not account.

<If much of the information below is already documented in a standardized report format required by the agency, attach that report in the appendix and refer to it in this section as needed.>

<If forecasts were produced for the project using more than one method, briefly explain why the forecasts detailed in Section 3 were selected over the alternate forecasts.>

5 Assumptions

This section identifies the exogenous forecasts and project assumptions used in the development of the traffic forecasts. Exogenous forecasts are made outside of the immediate traffic forecasting process. Project assumptions are established during project development and serve as the basis for the traffic forecast. Exogenous forecasts and project assumptions are leading sources of forecast error.

Population and employment forecasts, for example, are commonly identified as a major source of traffic forecasting error. These forecasts usually are made by outside planning agencies and are produced on a regular basis; that is, they are not prepared for any individual project. During project development, these forecasts are revised to match assumptions documented by the project team. Population and employment forecasts thus function both as exogenous forecasts and as project assumptions.

Section 5.1 records exogenous forecasts and assumptions common in most traffic forecasts. Section 5.2 records extraordinary, project-specific assumptions, including those that are qualitative.

5.1 Ordinary Assumptions

Traffic forecasting accuracy research has identified several exogenous forecasts and project assumptions that commonly are reported as sources of forecast error. This section documents these typical, or ordinary, assumptions. Such assumptions include:

* Macro-economic conditions (of the region or study area),
* Population and employment forecasts,
* Significant changes in land use,
* Auto fuel prices,
* Toll pricing and sensitivity,
* Auto ownership,
* Changes in technology,
* K-, D-, and T-factors,
* Travel times within the study area, and
* Duration between year forecast produced and opening year.

The assumptions can be documented in tabular format. The information should be corridor-specific to the extent possible, with an understanding that the forthcoming post-construction analysis may only be able to gather some information—population, for instance—at aggregate levels.

5.2 Extraordinary Assumptions

This section highlights variables from Section 5.1 that have a significant impact on the traffic forecast values and describes those assumptions in more detail.

Additionally, this section can describe uncommon, or extraordinary, assumptions that are specific to the project. This includes elements that may be qualitative, such as how the region may react to newly introduced managed lanes. Other examples may include a particularly large development that is expected to generate a significant portion of the demand on the project, impacts from adjacent construction, and specific policies or ordinances (e.g., parking prohibitions).

6 Post-Opening Data Collection

This section describes data collection needed to verify the traffic forecast and the key assumptions described in Section 5. Collection efforts may include collecting traffic counts, documenting key events (e.g., adjacent construction delays), purchasing location-based data, and/or gathering observed speed data.

7 Electronic Appendix: Supporting Files

The following materials and files are enclosed electronically <insert links as needed>:

1. Standardized traffic forecasting reports, if used by the agency for this project; and
2. All readily available documents related to the forecasting methods described in Section 4.