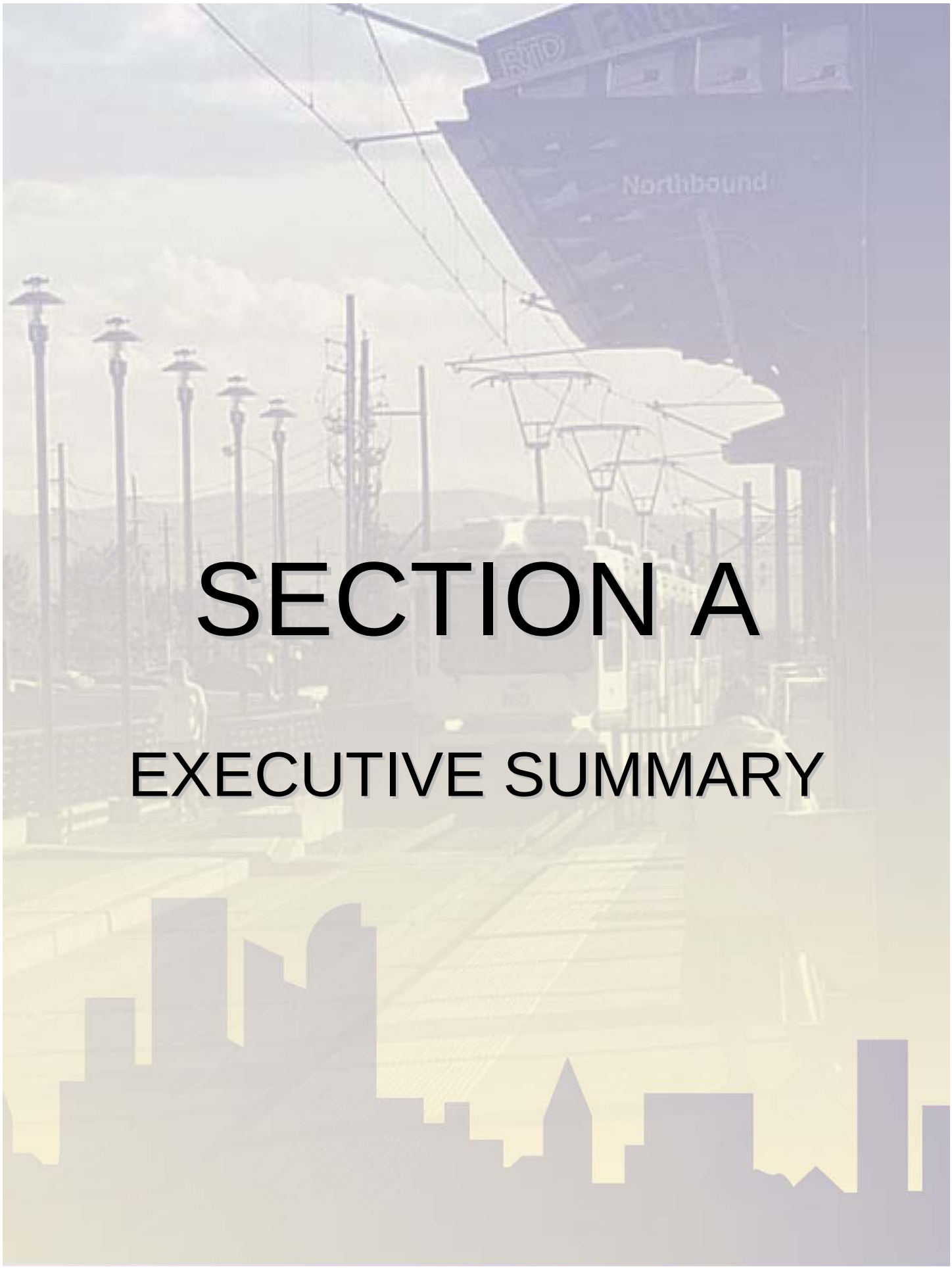

SECTION A

EXECUTIVE SUMMARY

Section A: Executive Summary

Project Description

Parsons was retained by the Regional Transportation District (RTD) to perform planning and conceptual engineering for three separate corridor investment initiatives – the Gold Line, North Metro and I-225 corridors – in the Denver metropolitan area. In 2001, major investment studies (MIS) were completed for each of these corridors resulting in the selection of a locally preferred alternative (LPA) for each corridor. The general location of these corridors are illustrated in the figure below.

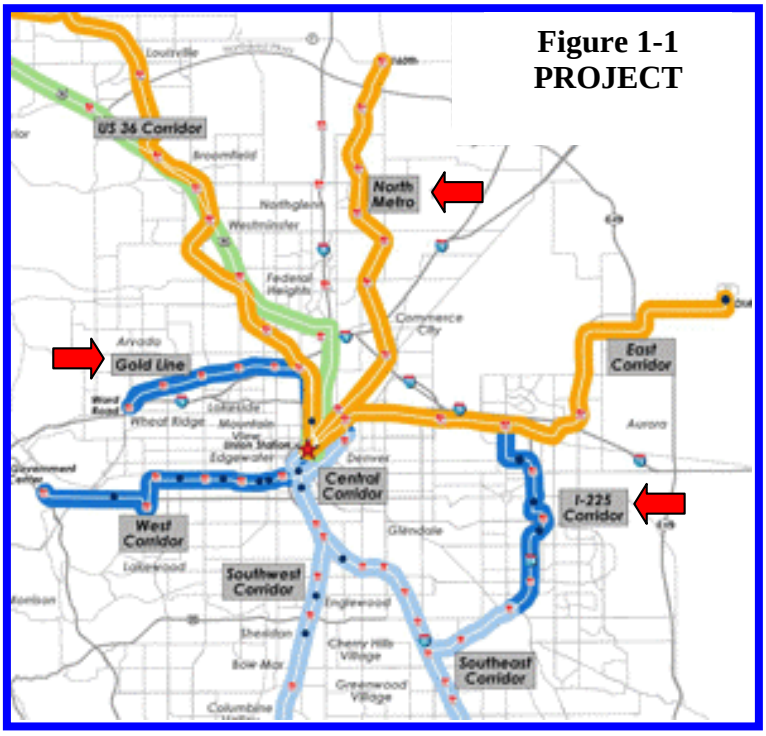

Figure 1-1
PROJECT

The Gold Line is an 11.1-mile double-track light rail transit (LRT) corridor extending from Denver Union Station in downtown Denver to Ward Road. Improvements in this corridor generally consist of at-grade and elevated track with seven multi-modal stations located throughout the corridor. The North Metro Transportation Study's locally preferred alternative identifies high occupancy vehicle, commuter rail and LRT or diesel multiple unit improvements from Denver Union Station to 160th Street. The 18.6-mile corridor will include eight multi-modal stations throughout the corridor. The I-225 Corridor includes 9.5 miles of light rail transit service with six stations (from MIS) between Parker Road and the planned I-70/East Corridor rapid transit station at Peoria and Smith Road, as well as widening of I-225 from six to eight lanes. FasTracks recommends seven transit stations.

Purpose of Study

The main purpose of this study was to identify workable alignment options and the associated right-of-way and station locations. The study used both qualitative and quantitative measures to evaluate alternative improvements for the Gold Line, North Metro and I-225 transit corridors against a baseline condition. Though many important issues and impacts of the corridor improvements were examined as part of this study, it is important to note that this project did not constitute a federally sanctioned environmental study under the National Environmental Policy Act (NEPA), nor did it provide the level

of design work associated with a preliminary engineering (PE) process. This study will serve as a key input into each corridor's future Preliminary Engineering and Environmental Impact Statement scheduled to commence in 2006

In the preparation of these conceptual plans, data was collected from a variety of sources. The data were in a number of different coordinate bases and with different degrees of accuracy. All data was moved to match RTD's aerial mapping (unmodified state plane) of the metropolitan area. Significant variations in the location of unchanged elements were noted between the 2002 and the 2004 flights for the RTD region and also between those flights and the mapping performed by Aero-Metrics in 2005 for the Gold Line and I-225 Corridors. The proposed track alignments and station locations were positioned with respect to the visual location of track or other controlling element. The purpose was to provide a depiction of the alignments anticipated in the MIS studies and Fastracks program. The alignments will need to be reestablished when more detailed survey information becomes available.

For each of the three corridors, the transit portions were required to fit the definition of the LPA identified in each corridor's MIS into the available right-of-way, and to identify areas where additional right-of-way is required. These MISs included definitions of the purpose and need for the corridor's transit improvements, and an alternatives analysis. The roadway improvements for these corridors identified in the Colorado Department of Transportation's (CDOT) Strategic Investment Plan have not, as of yet, undergone a similar level of analysis.

The planning work and conceptual engineering performed for each corridor in this study included conceptual definition of an alignment, potential station locations, park-n-Ride locations, conceptual engineering to identify and avoid fatal flaws, and general staging and phasing recommendations for both transit and roadway improvements. Moreover, the RTD Three Corridors Scoping Study accomplished the following goals identified in the scope of work:

- Confirmed and/or updated the findings of the RTD's MIS efforts and the Colorado Department of Transportation's Strategic Investment Plan for each corridor in regard to right-of-way requirements. This includes detailed right-of-way information, including acquisition and relocation data, for the City of Arvada at the Sheridan Station Area.
- Confirmed travel demand/ridership forecasts for each of the three corridors.
- Confirmed capital costs estimates for each of the three corridors.

Additionally, the Gold Line, North Metro, and I-225 MISs left several issues unresolved and these issues were reopened and examined as part of this study. For the Gold Line, the unresolved issues include the following:

- Constrained right-of-way along the corridor due to the desire of the freight railroads to double track their operations.

- Pedestrian and vehicle access issues to Olde Town Arvada from the Olde Town Arvada station that might require grade separation to facilitate movement.
- Impacts to historic structures in Olde Town Arvada including the Flour Mill and Water Tower projects.
- Horizontal and vertical LRT alignment impacts associated with the Grandview Avenue freight rail crossing.
- Coordination between the UPRR and BNSF RR freight rail operators for the alignment segment between Denver Union Station and the Denver/Adams County Line.
- Resolution of the LRT alignment and park-n-Ride locations between Ward Road and Tabor Street.
- I-70 roadway improvements that have not yet been brought to a conceptual engineering level.

The unresolved North Metro issues include:

- Funding issues constraining the background 2020 Regional Transportation Plan projects that will, in turn, limit the vision-based recommendations for the North Metro project.
- I-25 impacts between US-36 and downtown Denver, especially those related to the general purpose lanes and congestion levels.
- Potential loss of UPRR right-of-way between I-270/Brighton Blvd. and 40th Avenue for the LRT/DMU option.
- Potential extension of the LRT/DMU corridor further north, offsetting additional cost of the extension by recommending DMU technology over the more expensive LRT technology.

The I-225 unresolved issues include:

- Verification of adequate median width and right-of-way along I-225 between Parker Road and Colfax Avenue to incorporate both roadway widening and LRT.
- LRT alignment and park-n-Ride issues in the Civic Center area of Aurora near Exposition Avenue.
- The possibility of a second Aurora City Center LRT station.
- LRT alignment through Fitzsimmons Medical Campus and the possibility of a second Fitzsimmons station.
- Potential LRT grade separation at the Colfax Avenue and I-225 interchange.
- At-grade vs. elevated LRT crossing of Alameda Parkway.
- LRT alignment along Peoria Street.
- Socio-economic data issues revolving around differences between DRCOG's 2025 forecasts and Aurora City staff's own analysis based on letters of interest from developers.
- Determination of which stations are suitable for park-n-Rides and transit oriented development (TOD).

Each of these issues was addressed during the course of the study to the degree applicable. Findings for each of these issues can be found in the respective corridor definition, technology evaluation, traffic analysis and conceptual plan sections of this report.

Stakeholder Involvement Approach

As discussed previously, the primary purpose of this study was to identify an acceptable conceptual definition of various transit and roadway elements associated with the Gold Line, North Metro, and I-225 corridors; to identify the right-of-way requirements for each; and to provide validation of the conceptual cost estimates. The nature of this work did not require any public involvement, but did require a strong coordination effort with each of the stakeholder communities affected by the three corridor projects. As was stated earlier, this study was intended to identify workable alignment options and the associated right-of-way and potential station locations, and is not a substitute for the broad public involvement and input required when preparing NEPA documentation.

To this end, a stakeholder involvement approach was developed, tailored to each of the study areas including a methodology for policy and technical guidance for the study. This stakeholder involvement approach utilized a stakeholder involvement team that worked with RTD to coordinate stakeholder input. Throughout the study, stakeholder meetings were held with project partners including the cities of Arvada, Aurora, Commerce City, Thornton and Wheat Ridge, the City and County of Denver, Adams County, and the Colorado Department of Transportation. Contact and coordination occurred primarily through each government entity's staff liaison to RTD with occasional briefings made directly to the various city council transportation committees. All of the briefings and stakeholder meetings involved a variety of presentation materials illustrating the relevant issues as well as the benefits and impacts of various improvements and options. The presentation materials included a range of illustrated boards, maps, PowerPoint presentations, graphs, charts, photo simulations and text handouts.

The primary purpose of the project's stakeholder involvement process was to provide a forum for discussion of conceptual design issues relative to the development of the project's corridor definition and identification of the required right-of-way. No public meetings were conducted as part of this study. Rather, meetings were conducted with stakeholder staff members. Limited external coordination with outside agencies was conducted by RTD and the consultant team to identify and verify key conceptual design factors (e.g. utilities, property ownership).

Main Features of the Study

This study included the following main features addressed in later sections of this report:

- Alternatives definition for both the base level of activity and proposed scenarios, including both transit and roadway improvements

- Development of right-of-way information, aerial photography and surveying for conceptual corridor definition
- Utilities information
- Traffic analysis
- Civil and structural conceptual engineering
- Conceptual roadway design
- Trackwork engineering
- Alignment and station location refinement
- Right-of-way definition and analysis
- Cost validation

Each of these elements, including their study methodology and findings, can be found in sections B through H of this report and in the conceptual plans found in the appendices. These study elements will serve as key inputs to each corridor's Preliminary Engineering and Environmental Impact Statement (PE/EIS) efforts, scheduled to commence in 2006