NP & 1st Avenue Corridor Development Plan – Fargo, ND

Scope of Services

1.0 Inventory and Understanding of Existing Conditions and Issues

Objective: To initiate the project by becoming familiar with established planning efforts and relevant documents. This will also include a meeting with City staff to verify the project schedule and to collect available background information pertaining to the assignment.

Discussion: The consultant will obtain and review the following studies and documents:

a) NP/1st Avenue Environmental Assessment
b) 1999 Fargo Downtown Parking Study
c) Downtown Streetscape Plan
d) Downtown Fargo Redevelopment Framework Plan
e) Current Metropolitan Transportation Plan
f) 2007 Downtown Framework Plan
g) Previous one-way studies
h) Others as available and recommended by the study review committee

In addition to relevant studies, the consultant will meet with City staff to obtain baseline information and background data pertinent to the study area. This information should include but may not be limited to:

a) On-street parking inventory
b) Street design (existing cross-section on NP and 1st Avenues)
c) Traffic and Turning Movement Counts : AADT & Peak period turning movements (AM, PM, Noon)
d) Speed Data
e) Crash Data (previous 3 years)
f) Bus Routes
g) Delivery vehicle loading zones
h) Traffic signal locations and timings
i) Locations of emergency services and emergency vehicle routes

A kickoff meeting will be held with the study review committee to review project scope and schedule and to discuss project issues.

Task Deliverable: Develop detailed base maps of the critical project areas. This will also include a kickoff meeting with the study review committee to review project scope and schedule and to discuss project issues

Client Involvement: Assist in collection relating information.

2.0 Corridor Needs/Issues

Objective: To establish a preliminary summary of corridor issues, opportunities, and constraints that affect traffic engineering, safety, urban design, and future roadway improvements for both motorized and non-motorized forms of transportation.

Discussion: Identifying the issues along the corridor will first begin with an understanding of how traffic operates today as well as in the future under the existing lane geometry conditions using Highway Capacity Manual (HCM) methodology. This will also include a review of current traffic control, and roadway geometry. Through this review, the study team will examine ways to improve operational and safety issues as well as ways to improve aesthetics. Subtasks will include the following:

1. The study team will work with the Fargo-Moorhead Council of Governments (FM-COG) and the Advanced Traffic Analysis Center (ATAC) at NDSU to obtain and/or develop future year AADT traffic volumes for the current one-way operations in the study area that are reasonable.
2. With AADT projections provided by ATAC, the study team will develop year 2030 AM and PM peak period turning movement volumes at key intersections.
3. Using existing and future year traffic peak hour traffic volumes, the one-way operations will be analyzed using HCM methodology. This will establish the baseline operation conditions of the study area roadway network.
4. The study team will perform a cursory level safety analysis using crash information from the previous three years. This information will be used to help the study team and Study Review Committee in the selection of alternative lane geometry. Crash information and collision diagrams will be provided by City Staff.
5. A review of the following to determine if safety can be improved (the review will be supplemented by the results of the safety analysis):
    - Traffic control devices
    - Roadway geometry
    - Pedestrian Facilities
    - Bicycle Facilities
    - ADA facilities
6. Through the review of the study area, the study team will also look for opportunities to improve aesthetics as it relates to roadway features. The aesthetic features of corridor not related to the roadway will be examined as part of efforts described in Task 6.

Task Deliverable: Develop technical memorandum summarizing the operational characteristics of the existing one-way pair system using existing and future year volumes. The memorandum will also discuss the results of the safety analysis and potential improvements to traffic control and roadway geometry. The improvements will give consideration not only to vehicular traffic, but pedestrian and bicycles traffic as well. Other considerations that will be addressed include ADA issues and opportunities to improve roadway aesthetics.

Client Involvement: Assistance in identifying specific issues, opportunities, or constraints within the corridor and review and comment on task deliverables.

3.0 Alternatives Development and Analysis

Objective: To develop and analyze different roadway cross section, intersection, access and traffic control device alternatives to most effectively accommodate traffic needs for the corridor as well as access requirements for adjacent land uses.

Discussion: Access to property is a major consideration when developing different alternatives. In general, the primary purpose of arterials such as NP and 1st Avenues is the safe and efficient movement of people and goods. Equally important, however, is the effect the facility has on surrounding land uses. Improvements resulting in a significant change in the character of the corridor or intersecting streets must be carefully evaluated. The team must be sensitive to the needs of both the property owner and the public. Potential alternatives must provide a balance of both needs.

Up to five alternatives will be developed and analyzed as part of this study (including the no build alternative). In addition to the no build or "Do Nothing" alternative, the following alternatives will be considered as part of the study:

1. A design alternative which includes streetscape features, pedestrian and bicycle enhancements, and other design and safety measures, but leaves one-way operations intact.
2. A full conversion of the one-way pairs to two-way operations.
3. Modifying the termini points for the one-way to different locations.
4. A mix of the above.

Once alternatives have been developed, each will be evaluated according to the potential change to roadway geometrics, traffic operations, safety, and access. In addition pedestrian and bicycle issues will be studied. The following bullets describe some of these analyses in more detail.

- Alternative Corridor Layouts: For each alternative, the study team will develop a project concept plan at key intersections along 1st Avenue and NP Avenue. In addition, project concept plans will be developed for 1st Avenue and NP Avenue between key intersections. The concepts will include proposed back of curb locations, median type (if any), sidewalk

locations, right-of-way requirements, property lines, and proposed traffic control devices. These concept plans will be drawn on aerial photography in plan view. Typical cross sections will also be developed for each alternative. An order of magnitude cost estimate will also be developed for each alternative roadway concept.

- Traffic Operational Analysis: Each alternative will be evaluated according to several different measures of effectiveness. This will include the following:
    - Develop/obtain projected AADT for each alternative from ATAC.
    - Develop AM and PM peak hour turning movement volumes at key intersections for each alternative.
    - Perform capacity analyses for each alternative using HCM methodology. The results of these analyses will be used to refine and select a preferred alternative.
    - Parking Impacts: This will consist of a cursory examination of number of current parking stalls and how each alternative will add to or take away from the current number of parking stalls. The study team will work with stakeholders to minimize any reduction in parking stalls.
    - Pedestrian Impacts: The study team will perform a cursory examination of how pedestrian facilities may be affected by the alternatives and look for ways to improve pedestrian safety.
    - Comparison of existing and future year AADT
    - Comparison of existing and future V/C ratios at key intersections
    - Refined traffic signal timing plans for best progression
- Roadway User Benefit-Cost Analysis: To better understand the benefit of each alternative, it is important to know the value obtained from the money spent on a particular project. The study team will perform a roadway user benefit-cost analysis to determine which alternatives yield a greater benefit-to-cost ratio. User benefits will be determined using vehicle-miles traveled and vehicle hours traveled from the ATAC model. Cost information used for this analysis will be obtained from the order of magnitude cost estimates developed for the project.

Task Deliverable: Technical memorandum summarizing the operational characteristics of each alternative lane geometry using future year volumes. In addition, project concept layouts will be included to demonstrate the spatial implications of each alternative. Order of magnitude cost estimates will be developed for each alternative lane

geometry. Lastly, the memorandum will include results from a roadway user benefit-cost analysis.

Client Involvement: Client may provide assistance in developing alternatives. Review and comment on technical memorandum.

4.0 Corridor Economic Impact Analysis

Objective: The following is a list of objectives for the economic impact analysis:

1. To assess the prevailing economic conditions of the corridor as a basis for determining the economic impacts of altering the traffic patterns.
2. To project the economic impacts of altering the traffic patterns along the corridor.
3. To consult with corridor business owners, property owners and area developers to ascertain their development plans and to conduct a commercial market analysis for the corridor to better determine and project future growth.

Discussion: Objective 1: The economic conditions along the corridor and the economic impacts of modifying traffic patterns in comparable corridors will be analyzed. Subtasks will include the following:

a) In addition to the traffic, parking and transportation related inventory, the consultant (RCA) will assess the economic conditions of the NP/1st Avenue North corridor including collecting, analyzing and comparing rental rates, occupancy levels, property values and retail sales activity. This data will serve as a basis for projecting the economic impact of changing traffic patterns on the corridor. These economic conditions will also be evaluated in the context of historic commercial activity in the area and in comparison to other Fargo commercial corridors.

b) The consultant will conduct a benchmark survey of no less than six other comparably sized commercial business districts/corridors in other cities that ascertains the overall economic impacts before and after removal of one-way pairs has occurred in the past decade. This benchmarking survey will consider such measurable economic indicators as commercial occupancy and vacancy rates, changes to property values in comparison to other commercial districts within each community, changes to rental rates and retail activity, where data can be reasonably obtained and measured. This survey will also incorporate the time frame associated with these changes

Objective 2: The results of the benchmark survey and corridor economic assessment will provide the basis and insight as to the economic impact on the City of Fargo will be projected to occur from the elimination and/or reduction of one-way pairs in

Downtown and along the corridor. The results will be presented in a concise written report supplemented with tables and graphs illustrating all of the findings and projections.

Objective 3: In addition to ascertaining the prevailing economic conditions along the corridor, it is essential to incorporate the business plans and project the market opportunities that will occur along the corridor and in downtown Fargo. Therefore, the following subtasks will include:

a) The consultant will conduct extensive, confidential dialogue with downtown business interests and property stakeholders that include a determination of their potential business development plans (up to twelve individuals or businesses will be contacted). The results of these interviews will enhance the ability to project employment and business investment. This task will include ascertaining what has been achieved and absorbed since completion of the most recent commercial market studies for Downtown Fargo.
b) A commercial and residential market supply/demand analysis will be prepared that provides an understanding of the existing and projected market conditions in the study area and the emerging opportunities to attract new residential development along the corridor. The market analysis will help guide land use and transportation decision making and guide plans for new infrastructure.
c) The analysis will determine the future land uses most likely to be developed along the corridor in the context of the prevailing and projected Fargo market based on real world market conditions and regional conditions and trends influencing the corridor. The corridor as a sub-market will be evaluated within the context of Cass County and the MSA and will forecast the demand and absorption for the corridor including anticipated timing, land uses, building densities and other factors contributing to the viability of the proposed uses along the corridor.

Task Deliverable: A detailed description of the property and sales taxes generated along the corridor under prevailing conditions and discussion of how well the corridor is performing economically will be provided. A benchmark survey will be submitted that assesses how other corridors around the country that have removed one-way traffic patterns and the resulting economic changes. Also, the Consultant will submit a projection of the economic impacts that are anticipated when traffic patterns for each alternative change.

Client Involvement: Assistance in identifying specific economic issues within the corridor and review and comment on task deliverables.

5.0 Corridor Transit Impact Analysis

Objective: To assess the existing transit conditions of the corridor and to project the impacts to transit if traffic patterns along the corridor are altered. Also, to identify opportunities to mitigate and/or improve the transit system and operations if traffic patterns along the corridor are altered.

Discussion: The consultant will initiate the transit analysis by discussing local team expectations, timelines, and data needs for the transit element of the Corridor Plan. They will also discuss opportunities for public input into the corridor planning process, particularly related to outreach for residents using the transit system.

The consultant will also work with the study review committee to obtain existing transit route data, including inbound/outbound routing into downtown, bus stop locations, bus travel time, and other existing corridor related information. Existing plans and/or available information related to bus travel within the downtown area will also be reviewed. During the initial site visit, the consultant will meet with local staff and the transit agency staff, including drivers, to receive input on the corridor routing modifications and impacts to the existing riders. This information will be used in the development of transit alternatives.

In addition to the collection of existing transit information, the consultant will begin to address questions identified by MATBUS:

- Flow of transit routes coming in and out of the study area
- How do routes come and go with mid block locations, specifically buses coming in from Moorhead?
- How should the priority call up (traffic signal pre-emption) be used as part of this project to improve transit?
- What are the benefits and drawbacks of a one-way street system with regards to transit versus two-way operations for Fargo's downtown area.
- How will a conversion affect the downtown transit center operations?
- Loading and Unloading Access
- How will the City's planned growth affect transit within the study area?

The consultant will also meet with City transit, parking, engineering staff and/or downtown business groups, as needed, to understand future plans for transit facility/amenity needs along the corridor, such as parking requirements, striping, placement of bus stops, signage, signal pre-emption, etc.

Once a review of the existing conditions is complete, the consultant will develop up to three alternatives for the corridor. Depending upon the corridor options, the consultant will identify transit-related effects to the existing system, pros and cons

of each option, and cost estimates for changes. The alternatives will be presented in concert with the overall corridor options for public comment.

Task Deliverable: The consultant will prepare a technical memorandum identifying transit recommendations. The draft recommendations will be presented with other draft corridor options to ensure a cohesive planning process that includes all modes. Final recommendations will be prepared once all comments are received.

Client Involvement: Assistance in identifying specific transit issues within the corridor and review and comment on task deliverables.

6.0 Corridor Streetscape Impact Analysis

Objective: To assess the existing landscape conditions of the corridor and to project impacts to the streetscape if the roadway section along the corridor is altered. Also, to identify opportunities to mitigate and/or improve the streetscape if traffic patterns along the corridors are altered.

Discussion: As roadway alternatives are developed, landscape aspects along the corridor will be examined. This will include the evaluation and identification of an alternative that is cohesive with the established landscape palette in downtown Fargo. This may include improvements for the No Build alternative. The review, evaluation and recommendation of landscape improvements will be based on the following:

- Streetscape Review and Alternatives
- Selection and location of planting beds
- Selection and location of street furniture and other streetscape elements
- Review of signage standards
- Bicycle and Pedestrian safety routes and alternatives

Task Deliverable: The consultant will prepare a technical memorandum identifying landscape recommendations. The recommendations will include streetscape options, site furnishings, and landscape alternatives. The draft recommendations will be presented with other draft corridor options to ensure a cohesive planning document is submitted to the City and the community. Final recommendations will be prepared once all comments are received.

Client Involvement: Assistance in identifying specific streetscape issues within the corridor and review and comment on task deliverables.

7.0 Preferred Alternative Selection

Objective: To examine the results of analyses carried out for each alternative and to select a preferred alternative which minimizes impacts, and cost while increasing safety and mobility for both motorized and non-motorized forms of transportation.

Discussion: Using the results of the analyses, the study team will develop a recommendation that is aimed at improving the overall results relative to traffic operations, transit operations, development potential, property values, and streetscape improvements along the corridor. The recommendation will also consider the short term and long term needs of the study area. Lastly, a roadway section most appropriate to the context of the study area will be recommended.

Developing a recommendation will be facilitated by an impact analysis matrix along with input from the study review committee and the public.

Task Deliverable: Develop technical memorandum that identifies a preferred alternative and summarizes the justification for the selection of the preferred alternative.

Client Involvement: Review and comment on technical memorandum.

8.0 Preferred Alternative Impacts

Objective: To evaluate and document the various impacts that may result from the lane geometry proposed for the preferred alternative.

Discussion: The conversion of an existing one-way pair will have impacts on things other than traffic operations or roadway geometry. Other impacts to be studied for the preferred alternative will include:

- Drainage: The corridor will be reviewed from a hydraulic standpoint to identify existing drainage issues and possible corrective measures.
- Right-of-Way: The preferred corridor alternative project concept plan along with available GIS parcel information will be used to estimate the amount of right-of-way (ROW). The quantity of ROW will be used to develop order of magnitude cost estimates.
- Utilities: Similar to ROW, utility conflicts will be identified and quantified using preferred corridor alternative project concept plan along with available GIS parcel information. This information will be used to develop order of magnitude cost estimates.
- Roadway Network: A microscopic simulation analysis will be performed using SimTraffic Simulation software, version 7, at key intersections using proposed geometry. Year 2030 AM and PM peak period traffic volumes will be used for the simulation analysis along with the proposed lane configurations and optimized timings. For each scenario, ten simulations will be performed. The reported results will be an average of the ten runs. This analysis will also take into account the impacts of left turns and change in capacity. Lastly, the simulation analysis will include the effects of buses, and delivery vehicles. The City

will provide the consultant with available information regarding buses and delivery vehicles during both peak periods.

Task Deliverable: Technical memorandum summarizing the impacts associated with proposed lane geometry for the preferred alternative.

Client Involvement: Client may provide assistance in identifying further impacts to analyze. Review and comment on technical memorandum.

9.0 Public Participation Plan

Objective: To provide the public, and various interest groups with an opportunity to participate in the development and review of alternatives at project milestones. The input received from these groups will also be used in the selection of a preferred alternative.

Discussion: The proposed improvements within the study area represent important events for Fargo businesses, residents and motorists. Each alternative is significant because it will entail use of public funds, may require taking land, buildings and parking stalls. It could also affect growth and development patterns well into the future. Therefore, anyone affected by these improvements needs to be given ample opportunity to participate and be heard.

A public participation program will be established so that citizens can contribute to the project and decision process. The program will be designed at the beginning with the help of the City of Fargo's staff and the study review committee.

The public participation program will accomplish these objectives:

- Maintain active involvement of downtown business owners in the development and analysis of each alternative.
- Enable meaningful public involvement at key milestones.
- Address the needs and desires of the study participants and their respective issues.
- Strive to identify important concerns.
- Develop roadway and adjacent infrastructure concepts that are acceptable and supported by most (but not necessarily all) property owners in the general area.

The public consists of individuals and interest groups, each with different concerns and participation preferences. As a result, no single method of seeking public input is sufficient. Therefore, a multi-method approach will be used that is flexible to react to continuing changes in participants and situations.

Our recommended public participation program would consist of the following elements:

- Study Review Committee
- Public Meetings
- Small Group Workshops
- Newsletters and Website

Study Review Committee – The study review committee will be comprised of the following representatives:

- City Commissioner
- Senior City Planner
- City Engineer
- Traffic Engineer
- Representative from FM-COG
- Transit Administrator
- Representative from ND DOT Fargo District
- Representative from the Downtown area

Using this committee will provide continuity throughout the process and will allow the detailed study and analysis phase to move forward efficiently.

In this role, the study review committee will:

- Be apprised of the project progress and react to interim conclusions.
- Share insights into how the community residents, businesses and other interest groups might respond to these interim conclusions.
- Assist in clarifying public feedback received from public meetings or correspondence.
- Look for ways to solve problems and mitigate specific concerns.
- Provide advice about project enhancements.
- Offer suggestions to improve the overall public participation efforts.

The study review committee is not expected to develop a consensus recommendation regarding the project or present any type of formal committee conclusions to governing or other decision making bodies. The committee will meet five times over the course of the study at intervals corresponding to key project milestones. These meetings will be coordinated with public input meetings so as to make the most efficient use of any travel expenditures.

Public Meetings – Three public meetings will be held at key milestones and decision points. Each meeting will provide an opportunity for the public to contribute to methodologies, issues, alternatives and decision making. These meetings will be

informal in nature offering the public a chance to meet face-to-face with the project team. We will use various public involvement techniques to draw out genuine concerns.

To facilitate the communication process, color illustrations that can be easily understood will be developed. These illustrations will display project concepts, design options and impacts. This process enhances the ability to identify physical challenges, potential solutions, evaluate solutions from a visual perspective and communicate the unique features of an alternative in an understandable manner for all audiences.

Small Group Meetings – Through the NP and 1st Avenue Corridor Development Plan, many individuals, organizations, and business associations may emerge that have unique perspectives or interests in the study areas. A special effort will be made to learn their concerns, determine how they would like to participate, and help define problems and possible solutions. The HWS team will organize these workshops to be issue specific and will provide a forum for in-depth dialogue and problem solving. These will be conducted on an as-needed basis, but up to three (3) times for each group prior to each public meeting. A maximum of 12 individual and/or groups will be identified for these meetings.

Newsletters and Website – Up to three newsletters will be prepared at key project milestones. The newsletter will be provided to the client to be posted on a client hosted project website. A newsletter provides a mechanism for periodically communicating with relatively large numbers of people. It will be a useful educational tool especially for those who do not choose to actively participate in the study activities. Up to three newsletters are anticipated. Each phase of the study will have a Frequently Asked Questions (FAQ) section to facilitate the public's desire to learn about the project.

Project content will be developed for a client hosted website to provide constant accessibility to project information. This usually increases the public's interest and participation in the project. The website should include pages such as: project overview, contacts, vicinity maps, schedule and meeting information. This information transfer between the public and project team will help increase awareness of the issues and promote public feedback.

Task Deliverable: The task deliverables are listed as follows according to public meeting:

1. Public Meeting 1: Prior to the first public meeting, a project description and public meeting notice will be developed that explains the need for the project, outlines the study area, and gives project contact information. The client will be responsible for providing a meeting room in the general vicinity of the study area and to publish a box ad in

the Fargo Forum 10 to 15 days prior to the meeting. The content of the ad will be provided by the consultant. The meeting will be conducted to collect input from the public prior to the development of project alternatives.

Prior to the first public meeting, the study team will meet with the study review committee to review preliminary issues, establish goals and objectives, review preliminary evaluation criteria, and discuss the first public meeting.

2. Public Meeting 2: Prior to the second public meeting, an update to the project description and public meeting notice will be developed that explains the current status of the project. The client will be responsible for providing a meeting room in the general vicinity of the study area and to publish a box ad in the Fargo Forum 10 to 15 days prior to the meeting. The consultant will be responsible for the content of the ad. The public meeting itself will be conducted to present project alternatives and collect public input prior to development of the Draft Corridor Study Report.

   Prior to the second public meeting, the study team will meet with the study review committee to review preliminary alternatives, subsequent analysis and to discuss the second public meeting.

3. Public Meeting 3: Prior to the final public meeting, an update to the project description and public meeting notice will be developed that explains the current status of the project, and outlines the alternatives being considered with a listing of associated advantages and disadvantages. The client will be responsible for providing a meeting room in the general vicinity of the study area and to publish two box ads in the Fargo Forum 15 and 7 days prior to the meeting. The consultant will be responsible for the content of the ads. The public meeting itself will be conducted to present Corridor Study recommendations and to collect detailed public comments.

   Prior to the last public meeting, the study team will meet with the study review committee to review final recommendations, findings and to discuss the final public meeting.

Prior to each public meeting, alternative descriptions and updates along with meeting invitations will be provided to the client to be posted on the project website. All comments received at the meetings shall be logged and recorded to be included in the appendix of the final report. All necessary handouts, comment cards, presentation boards, etc, will be provided by the consultant. At the

conclusion of the final public meeting, the consultant will prepare a summation of public participation and will include all public input as an appendix to the final study.

In addition to the study review committee meetings described previously, two other study review committee meetings will be conducted during the course of the project to review progress and to further refine alternatives. One of these two meetings is the kickoff meeting described in Task 1.0.

Client Involvement: Client will review and comment on the public participation program. The client will help identify meeting locations. All costs associated with meeting room expenses shall be the client's responsibility. This will also include advertisements in the Fargo Forum.

10.0 Project Management/Documentation

Objective: Coordinate all project activities and be responsible for keeping the project on schedule. In addition, part of this task will include the development of a Draft and Final Corridor Study Report including Public Meeting Summary and associated appendices.

Discussion: This task will include the activities of general project oversight and completion of monthly progress reports. The monthly progress reports will be prepared each month to summarize the activities of the previous month and identify the work to be completed in the upcoming month.

This task will also include documentation activities related to the Draft and Final Corridor Study Report including Public Meeting Summary and associated appendices. The report format will be a compilation of technical memorandums from the different project milestones along with a summary of the study process.

Lastly, this task also includes presentations of the final draft recommendations to the Fargo Planning Commission and the Fargo City Commission

Task Deliverable: Up to 25 copies of the Draft Corridor Study Report and up to 50 copies of the Final Corridor Study Report will be submitted documenting project findings and recommendations. An electronic copy of the final report will also be submitted.

Progress reports will be submitted electronically to City Staff each month to summarize project activities.

A presentation will be developed and given to the Fargo Planning Commission and the Fargo City Commission to explain the project findings and the final draft recommendations.

Client Involvement: Client may provide feedback on the reports and presentation.