# Summary

For more than a century, a large railroad yard has existed in an area bounded by John Kronk, Livernois, and Dix extending west to about Miller Street. This yard is just a short distance west of the junction of mainline railroad tracks running east-west and those running roughly north-south (Figure S-1).

A significant volume of freight being moved by railroads today is being delivered to the rails by trucks. Following the train trip, it is again moved by truck to its final destination. These movements between rail and truck are termed intermodal freight transportation. The most common movements involve transferring containers or trailers between railroad flatcars and trucks. This activity usually takes place at a location called a terminal. Examples are shown on Figure S-2.

The Detroit Intermodal Freight Terminal Project consists of the development of a complex of terminals operated by several railroads, which will provide efficient intermodal service to business and industry. Presently, there are two intermodal terminals in close proximity in Southwest Detroit: Detroit-Livernois Yard (operated by CSX and Norfolk Southern) and the newly-created yard behind the Michigan Central Depot just north of Bagley (operated by Canadian Pacific Railway). There is another smaller area that may be used for intermodal freight just south of Clark Street adjacent to the old Cadillac plant. These three form the nucleus of what is referred to as the Detroit Intermodal Freight Terminal, the DIFT. There are six other intermodal freight terminals in the Detroit and Southeast Michigan area.

It is important that the movement of the freight that drives jobs and economic growth be facilitated. It is also important to respect the quality of life of the residents of Southwest Detroit, Dearborn, Melvindale and Allen Park. The current DIFT Study is designed to address these issues. During 2001, MDOT and its consultants are conducting a feasibility study by analyzing alternatives for terminal development and their associated truck movements, evaluating their impacts, and making recommendations to protect the neighborhoods as much as possible. This will be done well if the neighbors are involved. Their involvement has been invited since the outset of the study.

## Project Purpose

The purpose of the Detroit Intermodal Freight Terminal Project is to support the economic competitiveness of southeastern Michigan by improving freight transportation opportunities and efficiencies for business and industry. The goal is to develop a regional intermodal facility with sufficient capacity to provide for existing and future intermodal demand. The anticipated public benefits of developing the Detroit Intermodal Freight Terminal complex include the following:

- Investment in Southwest Detroit/East Dearborn by building/rebuilding infrastructure that not only accommodates transportation but buffers the rail terminal from adjoining residential areas; reduces safety concerns by avoiding street crossings of rail lines; corrects drainage problems at a number of streets that pass under rail lines; and, establishes sound attenuation devices that reduce unwanted noise.

- Economic redevelopment of portions of Detroit, Dearborn and vicinity, as well as the region, with the associated increase in employment and tax base, including:

    - More construction, manufacturing and transportation jobs.

    - Lower costs to Greater Detroit Area consumers of products from automobiles to other consumer products.

- Reduced truck "vehicle miles traveled" on Michigan highways. Reducing truck "VMT" saves lives, reduces pollution, and conserves highway capacity.

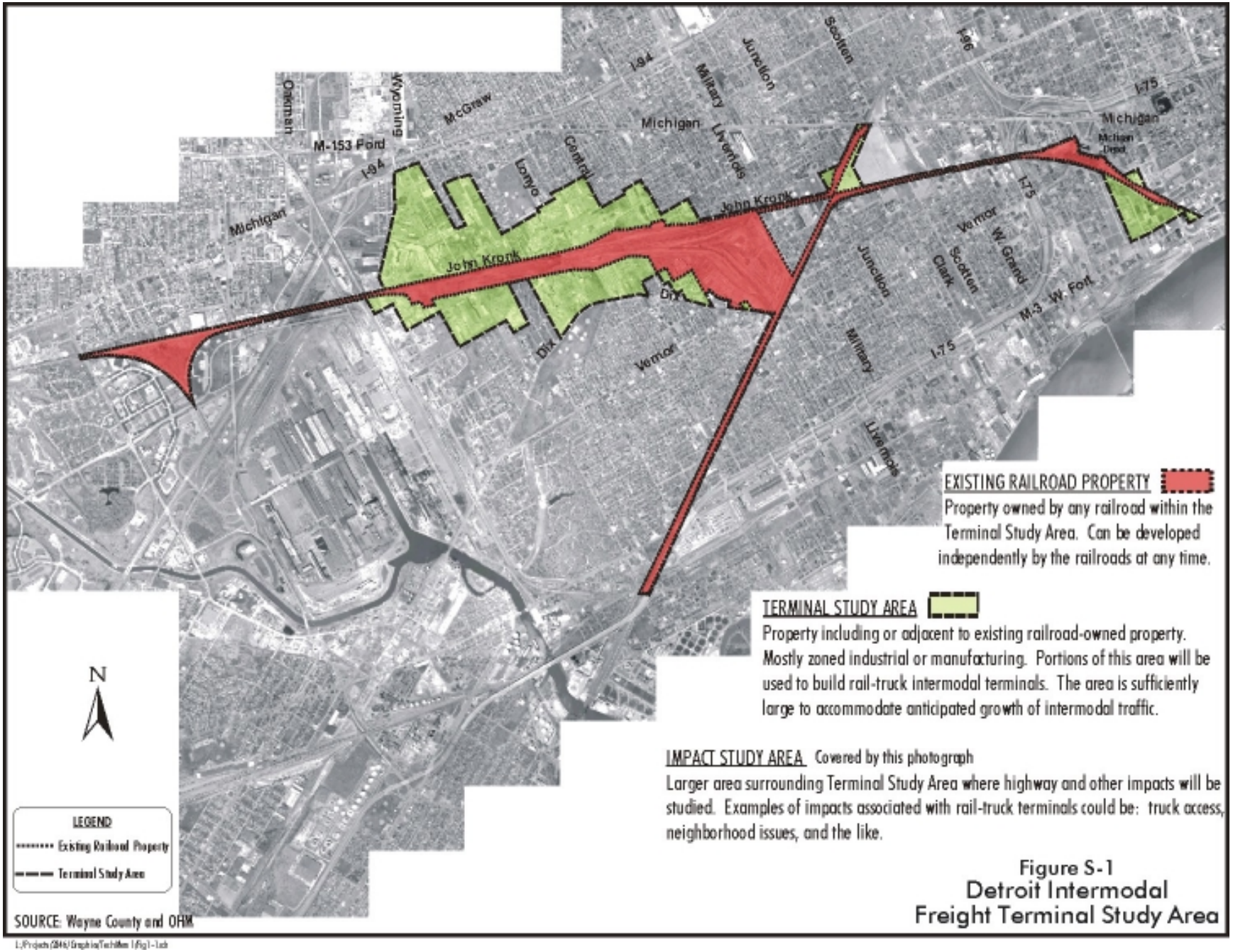
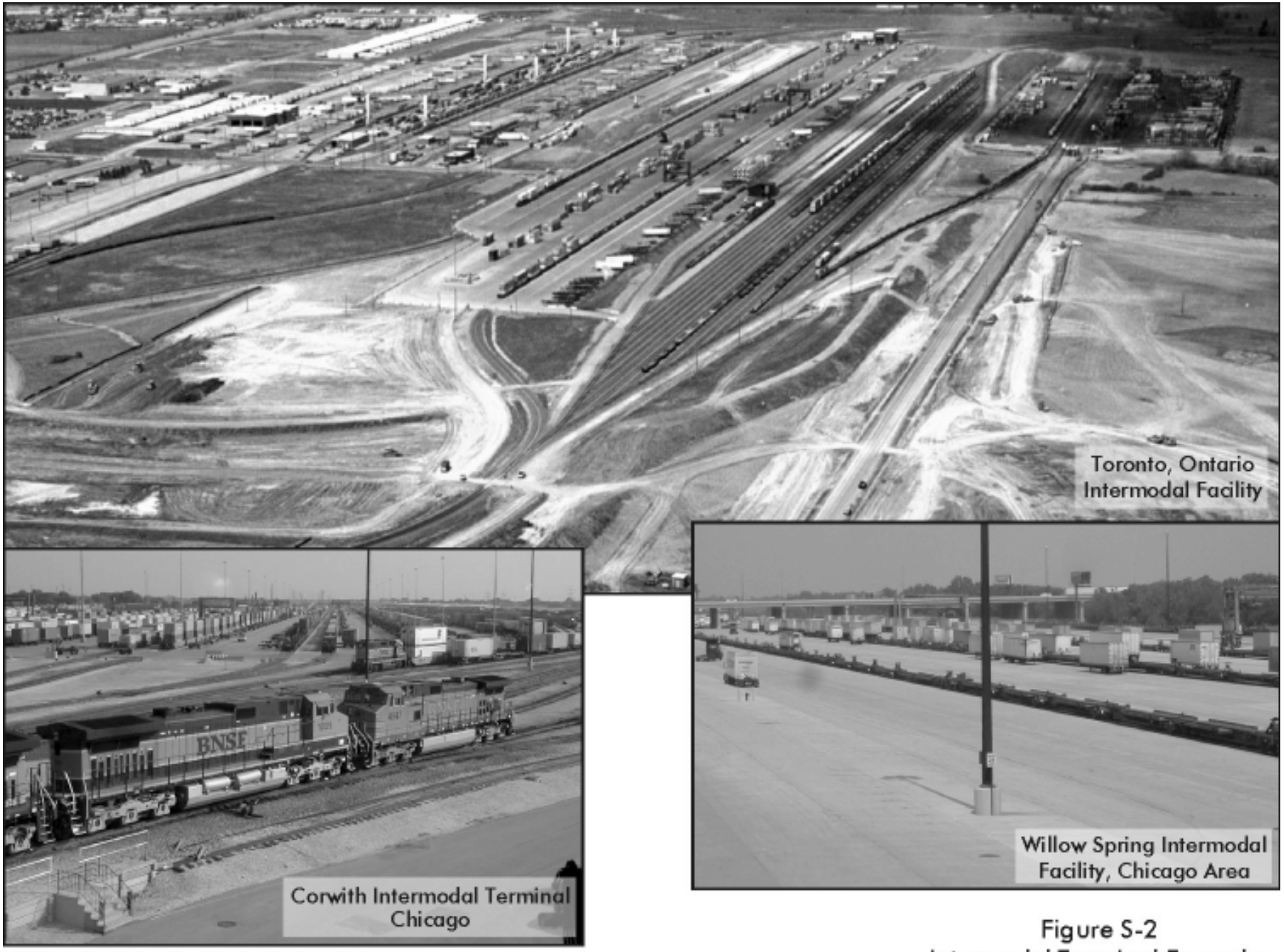



Figure S-1
Detroit Intermodal
Freight Terminal Study Area




SOURCE: Canadian Pacific Railway & The Corradino Group of Michigan, Inc.

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Figure S-2
Intermodal Terminal Examples

- Provision of necessary infrastructure to support current and future distribution needs of the auto manufacturers, the state's largest industry.

- Existence of the opportunity for MDOT to focus highway investments at a single World-Class freight transportation hub around which further industrial development can occur.

The anticipated private benefits include:

- For the railroads:
  - Opportunities to gain significant additional traffic volume.
  - Low-cost, efficient rail and terminal capacity.
- For the auto manufacturers:
  - Enhanced access to both domestic and international intermodal freight transportation systems.
  - Efficient service based on equal access for all Southeastern Michigan Class I rail carriers.
- For other shippers/receivers in Southeastern Michigan:
  - Improved intermodal freight access to the 8th largest metropolitan area in the United States.
  - A greater range of freight transportation service options.

If nothing were done, on the other hand, the railroads would likely pursue developments to accommodate their needs which may involve less consideration of community/environmental issues as compared to situations in which government is involved. And, if nothing were done, shippers will move traffic directly by truck to other gateways in ever-growing amounts (e.g. Chicago, Cincinnati, Toledo) with negative environmental and economic consequences for the Greater Detroit Area.

The goal of this Feasibility Study is to facilitate the project goal by:

- Identifying the footprint, and requirements for road right-of-way, and/or ancillary railway facilities, for the Intermodal Freight Terminal under several growth scenarios;

- Identifying practical alternatives for roadway access to these alternative scenarios for the Intermodal Freight Terminal; and,

- Identifying potential environmental impacts of the project, and where possible and through continuing analysis, proposing methods to avoid and/or minimize these impacts.

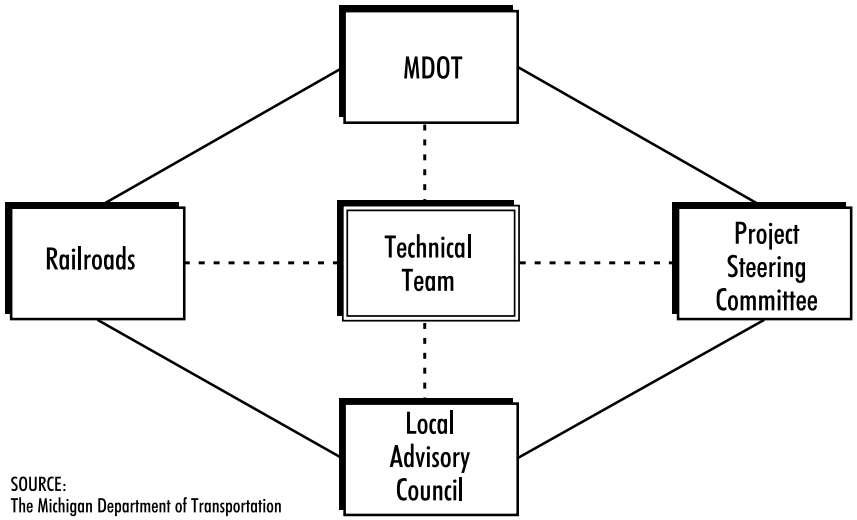
## Organization

The organization guiding the Detroit Intermodal Freight Terminal Project is illustrated on Figure S-3. The roles of each participant are as follows:

**Michigan Department of Transportation** – MDOT is the contracting agency for the study. It has ultimate responsibility for making study recommendations to the Governor. MDOT has responsibility for implementing the project's results.

**Project Steering Committee** – This group is comprised of MDOT, City of Detroit, Wayne County, City of Dearborn, SEMCOG, the Federal Highway Administration, the Detroit Economic Growth Corporation, DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, and Arbor Vista Transportation Consultants. CSX, Canadian National Railroad (CN), Canadian Pacific Railway (CP) and Norfolk Southern Railroad (NS) also participate. The Steering

Figure S-3
Detroit Intermodal Freight Terminal Project
Project Organization




SOURCE:
The Michigan Department of Transportation

Committee provides monthly guidance of the project. Its meetings are open to the public.

**Local Advisory Council** – This group is comprised of individuals representing themselves and groups from the study area. Invitees and those who have joined include Alliance Shippers, Inc., Barge Transit, Boniface Community Center, The Canadian Transit Company, Centra Inc., Corktown Citizens District Council, Detroit Chamber of Commerce, Detroit International Bridge Company, Detroit Police Department, Hispanic Business Alliance, Hubbard-Richard Citizens District Council, Latino Family Services, Michigan Environmental Council, Mt. Zion MBS/Moses, The O-J Group, Southwest Detroit Business Association, Southwest Detroit Coalition, U.S. Customs Ambassador Bridge Station. This group receives project reports prior to discussions at public meetings. It is asked to provide input to the course of the project. Its meetings are open to the public.

**Railroads** – The list of railroads that could be affected by this project include Burlington Northern Santa Fe, Canadian National Railway, Canadian Pacific Railway, CSX Transportation, Norfolk Southern Corp., and Union Pacific Railroad. They review, as appropriate, products of project and provide input to the Technical Team to develop intermodal terminals, the proposed construction of appropriate rail connections and other intermodal transportation facilities/service.

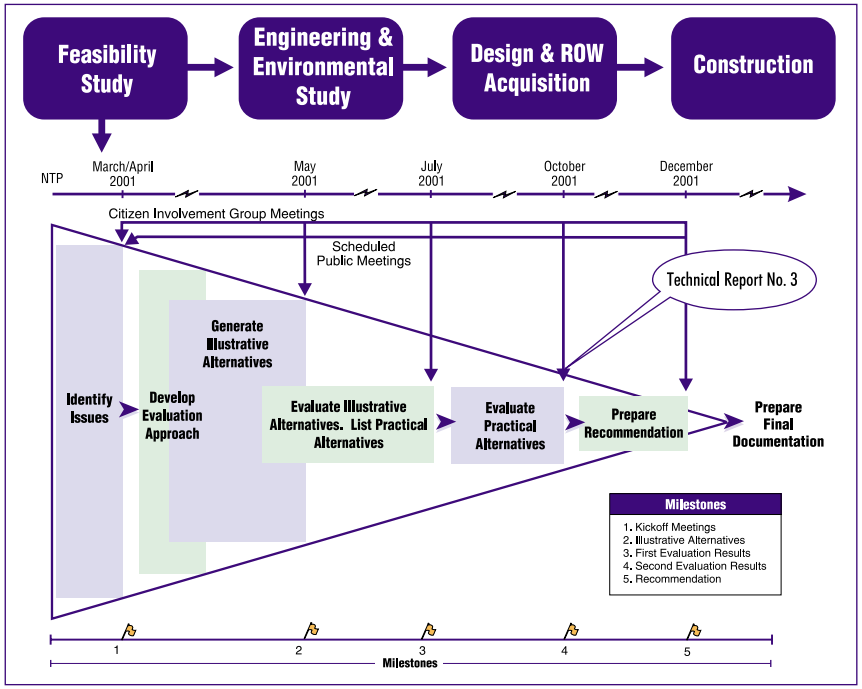
**Technical Team** – This group is comprised of a technical representative of each government agency represented on Project Steering Committee. It meets monthly to review/direct work of the consulting team, The Corradino Group, Arbor Vista Transportation, et al.

## Schedule

The Feasibility Study is the first of three steps that must be taken if a project is to advance to implementation. This Feasibility Study is viewed as a process where, at the outset, many options are examined across a broad background of data to help narrow the focus to a fewer number of alternatives that have greater potential to work (Figure S-4). The process then increases the depth of analysis on these fewer alternatives, again moving toward defining those more likely to be implemented. This narrowing process continues until a point when, if improvements are ultimately found to be feasible, a separate environmental study will be performed to determine if federal clearance can be achieved.

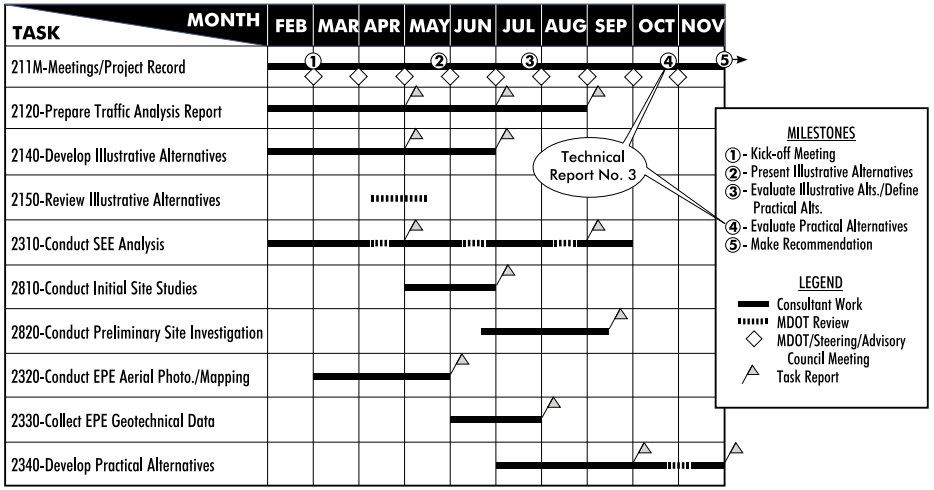
The Feasibility Study phase of the DIFT Project is scheduled to take ten months beginning in early February and ending by early December 2001 (Figure S-5). In March, and then again in April, the MDOT/consultant team presented the project to the public. Meetings have been and continue to be held with individuals and small groups, all with the intent of introducing the project and gathering information on concerns/needs associated with intermodal activity now and in the future. This information, combined with guidance/input provided by members of the project's Local Advisory Council, Technical Team

Figure S-4
Feasibility Study Process




Source: The Corradino Group of Michigan, Inc.

Figure S-5
Detroit Intermodal Freight Terminal Project
Schedule for Feasibility Study Phase




SOURCE: The Corradino Group of Michigan, Inc.

and Steering Committee, allowed Technical Reports No. 1 and No. 2 to be prepared. TR No. 1 defined the Illustrative Roadway Alternatives, i.e., concepts associated with the Detroit Intermodal Freight Terminal Project. These concepts were presented to the public in the latter part of May to gather further input so the alternatives could be refined, and eight evaluation criteria were rated by the public, the Local Advisory Council and the Technical Team. Based on that input, the Illustrative Alternatives were refined and evaluated. The results were presented in Technical Report No. 2—Evaluation of Illustrative Roadway Alternatives. In it, the consultant concluded that the Baseline roadway system, which includes no improvements beyond those already committed to in SEMCOG's long-range plans, can handle traffic expected with the maximum expansion of the intermodal terminal at the Detroit-Livernois Yard. The likely roadway-related impacts measured in eight areas are not expected to be significant. Nevertheless, the consultant proposed a list of improvements to the Baseline system be studied further to determine their cost effectiveness, including the associated benefit to the surrounding community. These are, in priority order:

- Grade separating Lonyo and Central from the rail lines at the rail yard.
- Rebuilding the ramps on the north side of the I-94/Livernois interchange.
- Reconfiguring the Wyoming/Kronk intersection.
- Modifying the I-94 exit to Wyoming.

- Resignalizing and, perhaps, realigning the Michigan Avenue/ Wyoming intersection and the Michigan/Livernois intersection.

- Modifying the Waterman Avenue underpass of the rail line, which may not be needed if the truck-only road is chosen for implementation.

The consultant also proposed that the truck-only road on railroad property, should be advanced:

- Discussing with MDOT and the railroad's engineers the proposal's operational viability.

- Studying the Springwells terminus, including the need for signalization of the new intersection with Springwells and farther north along Springwells in advance of the railroad overpass.

- Reviewing the cost effectiveness of this proposal.

Developing a road around the perimeter of the terminal to include a buffer was also proposed for study. This may allow the existing John Kronk Street to become a circulator road internal to the terminal.

In advancing these proposed roadway improvements, the consultant noted that the traffic analysis will be updated to reflect expected future conditions. This involves changes from the traffic forecasts used in the evaluation of Illustrative Roadway Alternatives as they were uniquely emphasized to create a rigorous test with a significant safety factor.

This document summarizes Technical Report No. 3 which covers the evaluation of these roadway improvement proposals. But, the principal focus is on the three rail strategies and their potential effects. So, first the rail strategies are refined. Then, the impacts of the roads that serve them are presented, followed by the impact assessment of the three rail strategies.

## Alternative Rail Strategies

The principal focus of this report is on the three Rail Strategies. The baseline rail strategy assumes activity will be contained on the existing property (about 500 acres, i.e., the property in red on Figure S-6). All four Class I railroads are expected to conduct intermodal operations using five gates (A through E) (Figure S-6). But, not all intermodal traffic will be accommodated here as other terminals will remain in operation outside the project area. Other terminal strategies assume expansion of the rail property, with government's assistance.

At the outset of this project, the maximum terminal area was to be served by nine gates (A through I) (Figure S-7). This assumes the continuation of the Vernor Yard behind the Michigan Central Depot (Gate A), the use of the Cadillac-Clark Street property (Gate B), and the expansion of the Detroit-Livernois Yard (Gates C through I). While the exact expansion of the Detroit-Livernois Yard was not then known, Figure S-6 defined an area sufficiently large (about 1,175 acres, i.e., the property in green) to accommodate the growth in intermodal traffic plus a buffer between the terminal complex and adjoining land uses. This large area, while always considered more than needed, allowed the maximum impact of the proposed intermodal facility to be evaluated. That assessment was presented in Technical Report No. 2. Now, this concept is revisited along with Rail Strategies 1 and 2 to reflect the increased base of information assembled since the feasibility study began.

### Revised Rail Strategies

The Detroit Intermodal Freight Terminal will consist of several terminals located adjacent to one another in southwest Detroit. These alternative strategies include: 1) Rail Strategy 1, called the Baseline or no action alternative, is defined no use of federal funding for terminal development and expansion of the rail routes; 2) terminal development with limited additional property added and using federal funding, i.e.,

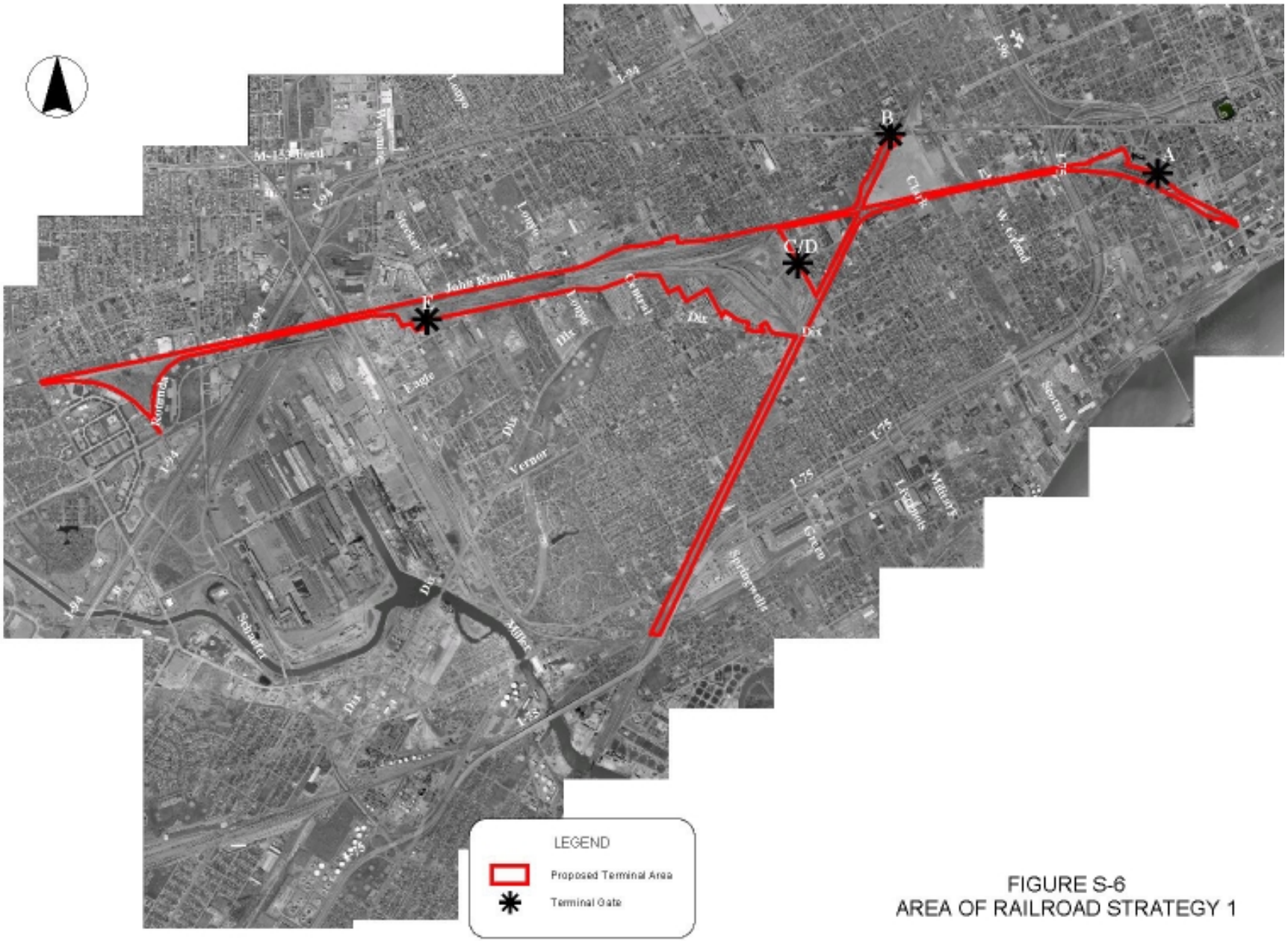



FIGURE S-6
AREA OF RAILROAD STRATEGY 1

Source: Wayne County and The Corradino Group of Michigan, Inc.

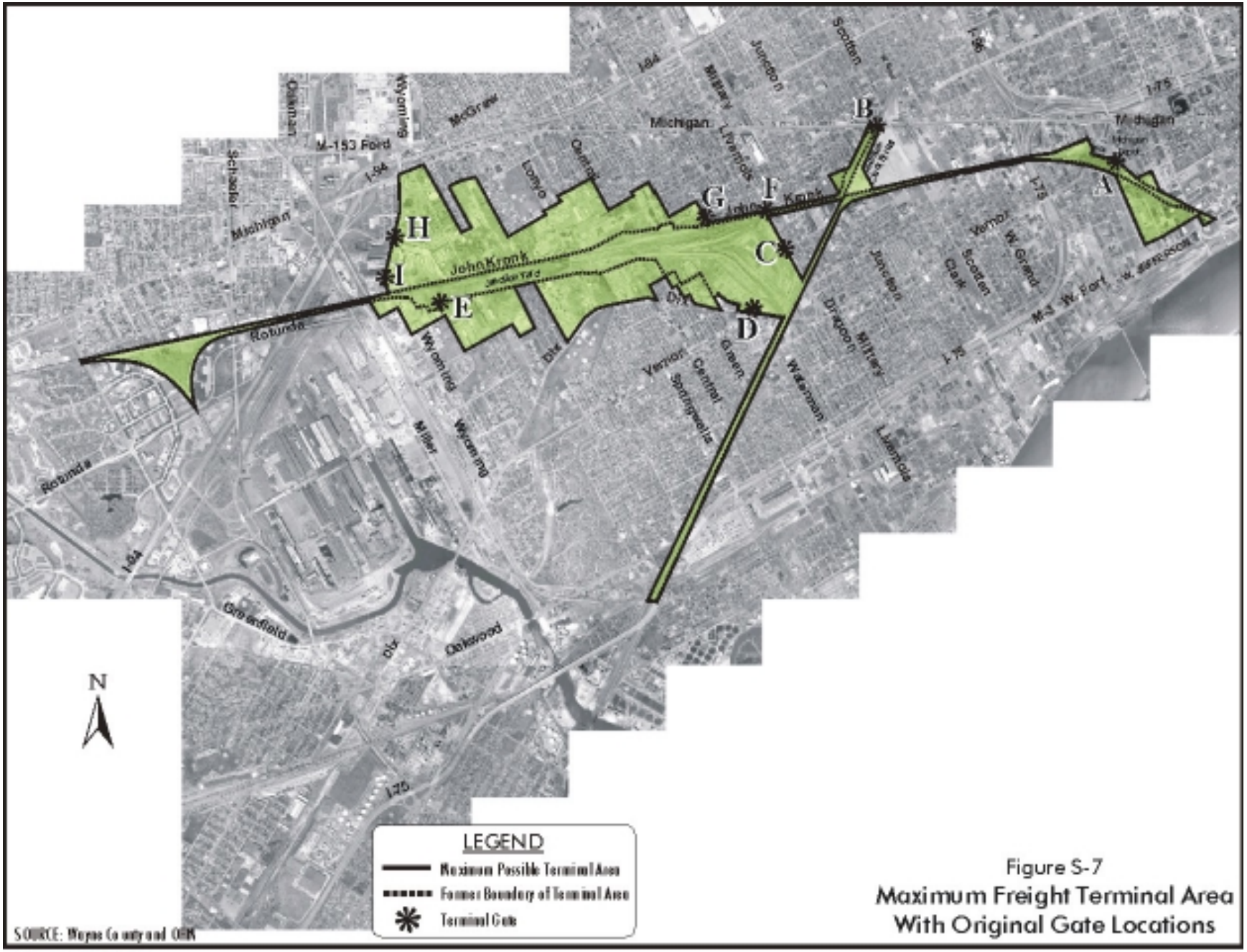



Figure S-7
Maximum Freight Terminal Area
With Original Gate Locations