

Greater Duwamish Manufacturing and Industrial Center Plan

Greater Duwamish Planning Committee

Rob Adamson, Georgetown Business Association

TJ Anderson, Northland Services Inc.

Jack Eckrem, Evergreen Treatment Services

Steve Elmer, Port of Seattle, Marine Division

Dan Gatchet, West Coast Trucking

Karen Guzak, Sunny Arms Artists' Cooperative

David Huchthausen, Co-Chair, Somerset Properties

Lise Kenworthy, Seattle Marine Business Coalition

Patrick McGarry, Manson Construction

Greg Moore, Rainier Cold Storage

Patti Otley, Burlington Northern Santa Fe Railroad

Mike Peringer, SODO Business Association

David Schneider, Port of Seattle, Marine Division

Jim Van der Veen, Crowley Marine Services

Bill Vivan, Co-Chair, Gull Industries

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Urban Works

BST Associates

Dames and Moore

KJS Associates

During the process, the Planning Committee has also received information and/or helpful comments from the following:

Denise Andrews, Seattle Ant-Graffiti Program

Cynthia Bradshaw, King County METRO

Frank Clark, Stevedoring Services of America

Charlie Cuniff, ECOSS

Ted Cunningham, Healthy Life Chiropractic

Kim Ducote, Rubanco

Bruce Eastes, Motor Freight Services

Rich Feldman, King County Labor Council

Don Frey, Puget Sound Trucking

Dave Gering, Manufacturing Industrial Council

Richard Hallenbeck, NW Office Furniture Recycling

Chris Hansch, Paper Zone

Ron Jay, Process Heating Co.

Leonard Kolb III

Bob LeCoque, Markey Machinery Co., Inc.

Fernando Leiva, King County Metro

Tom McQuaid, Nordic Cold Storage

Rick Osterhout, Kidder-Mathews

Les Rubstello, WSDOT

Terry Seaman, Seidelhuber Iron & Bronze Works Inc.

Captain Tom Wilkinson, Port of Seattle Police

and many others

Addendum to the Greater Duwamish M & I Center Plan

The GDPC made the following changes to the 4/27/99 version of the M & I Center Plan in response to public comment.

Addendum	4/27/99 Version
JOBS & ECONOMICS	
<p>EC-2 New Definition of Industry. Adopt the GDPC's definition of industry and incorporate it into City of Seattle land use code:</p> <p>For the purpose of land use code interpretation, the intent of industrial zoning is to affirm the compatibility of infrastructure requirements, services, and regulatory support necessary to sustain industrial economic vitality and the ability to provide family wage jobs. This interpretation shall include the recognition that industrial activities are typically not compatible with office, retail, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for public services and negatively impacting industry's ability to sustain its employment base. The objective of industrial zoning shall be the segregation of business activity based on compatible uses and impacts as well as utility and infrastructure requirements.</p> <p>Industrial activities shall be defined and characterized as the manufacture, assembly, storage, repair, distribution, research/development and transportation of materials, goods and finished products including <u>advanced technologies</u>, commercial fishing and resource extraction and handling. The movement of trucks, trains, ships, airplanes and nighttime as well as daytime business operations are integral to this activity. Industrial air, noise and light emissions, while within legal limits, are often greater than those found in office, retail, or residential areas.</p>	<p>EC-2 New Definition of Industry. Adopt the GDPC's definition of industry and incorporate it into City of Seattle land use code:</p> <p>For the purpose of land use code interpretation, the intent of industrial zoning is to affirm the compatibility of infrastructure requirements, services, and regulatory support necessary to sustain industrial economic vitality and the ability to provide family wage jobs. This interpretation shall include the recognition that industrial activities are typically not compatible with office, retail, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for public services and negatively impacting industry's ability to sustain its employment base. The objective of industrial zoning shall be the segregation of business activity based on compatible uses and impacts as well as utility and infrastructure requirements.</p> <p>Industrial activities shall be defined and characterized as the manufacture, assembly, storage, repair, distribution, research/development and transportation of materials, goods and finished products including commercial fishing and resource extraction and handling. The movement of trucks, trains, ships, airplanes and nighttime as well as daytime business operations are integral to this activity. Industrial air, noise and light emissions, while within legal limits, are often greater than those found in office, retail, or residential areas.</p>

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<p>EC-10 Piers. Amend City codes (Land Use Code, Building Code, Seattle Fire Code). <u>To</u> the extent that the Land Use Code includes policy statements about other types of structures (housing, industry, etc.) and/or the siting of those structures and uses, <u>it</u> should also include acknowledgment that piers provide a base of operations here thereby generating jobs and export revenue for Seattle, and that Seattle competes with other West coast ports for the business piers can create. Additionally, each of these City codes, to the extent applicable, should be so indexed that all individuals seeking to find out applicable design and construction standards and the potential availability of Seattle Fire Code Alternates <u>and</u> can easily locate the pertinent regulations <u>in</u> all codes.</p>	<p>EC-10 Piers. Amend City codes (Land Use Code, Building Code, Seattle Fire Code). to the extent that the Land Use Code includes policy statements about other types of structures (housing, industry, etc.) and/or the siting of those structures and uses. It should also include acknowledgment that piers provide a base of operations here thereby generating jobs and export revenue for Seattle, and that Seattle competes with other West coast ports for the business piers can create. Additionally, each of these City codes, to the extent applicable, should be so indexed that all individuals seeking to find out applicable design and construction standards and the potential availability of Seattle Fire Code Alternates can easily locate the pertinent regulations.</p>
<p>EC-12 Consider Transfer of Development Rights <u>OED will prepare a study exploring the feasibility of using the Transfer of Development Rights (TDR) and similar strategies as a tool to present Seattle's industrial land base, whereby commercial development rights on sites presently occupied by industry may be used on other sites.</u></p>	
<p>EC-1213 Create Additional Financing Tools. Seek sources of funding for land acquisition, environmental cleanup and general business financing <u>focus</u>targeted specifically at the industrial uses in the Duwamish M and I Center. <u>Potential</u> Such-sources could include local sources, industrial revenue bonds, or federal sources.</p>	<p>EC-12 Create Additional Financing Tools. Seek sources of funding for land acquisition, environmental cleanup and general business financing targeted specifically at the industrial uses in the Duwamish M and I Center. Such sources could include local sources, industrial revenue bonds, or federal sources.</p>
<p>EC-14 13</p>	<p>EC-13</p>
<p>EC-15 14 Maintenance Dredging. The City shall spearhead a process (in cooperation with the Washington Department of Fisheries and Wildlife, Army Corps of Engineers, tribes, and the Department of Ecology) to obtain <u>timely</u> dredging permits <u>in a timely manner</u>. The inability to obtain such permits in a timely manner may force marine businesses out of the Duwamish M and I Center.</p>	<p>EC-14 Maintenance Dredging. The City shall spearhead a process (in cooperation with the Washington Department of Fisheries and Wildlife, Army Corps of Engineers, tribes, and the Department of Ecology) to obtain timely dredging permits. The inability to obtain such permits in a timely manner may force marine businesses out of the Duwamish M and I Center.</p>

Addendum to the Greater Duwamish M & I Center Plan

<p>EC-16 45 Regional Infrastructure Finance Plan. In cooperation with representatives of the Duwamish M & I Center, d Develop a regional finance plan for <u>building, maintaining, and improving</u> infrastructure, with the Duwamish M and I Center as the catalyst. The Duwamish M and I Center should get its fair share of regional tax revenue generated to fund its needed infrastructure <u>measured by its economic contribution.</u></p>	<p>EC-15 Regional Infrastructure Finance Plan. Develop a regional finance plan for infrastructure, with the Duwamish M and I Center as the catalyst. The Duwamish M and I Center should get its fair share of regional tax revenue generated to fund its needed infrastructure.</p>
<p>EC-17 46 Prepare Annual Financial Data for Distribution. On a biannual basis, the City should <u>publish</u> arrange for a short economic assessment of the M and I Center, which updates:</p> <ul style="list-style-type: none"> • The dollar value of <u>various tax revenues</u> taxes generated; and • The number and type of jobs generated. 	<p>EC-16 Prepare Annual Financial Data for Distribution. On a biannual basis, the City should arrange for a short economic assessment of the M and I Center, which updates:</p> <ul style="list-style-type: none"> • The dollar value of taxes generated; and • The number and type of jobs generated.
<p>EC-18 47</p>	<p>EC-17</p>
<p>EC-19 48</p>	<p>EC-18</p>
<p>EC-20 49</p>	<p>EC-19</p>
<p>EC-21 20</p>	<p>EC-20</p>
<p>Addendum</p>	<p>4/27/99 Draft</p>
<p>LAND USE</p>	
<p>LU-6 Criteria for Location of Public Facilities. Adopt a <u>policy</u> definition for limiting public facilities in the Duwamish M and I Center in the Comprehensive Plan and Land Use Code. In order to be a permitted public facility use, the following criteria must be met:</p> <p>A. Be industrial uses that meet the recommended M and I Center Plan definition of industry (as defined in Code Amendments and Regulatory Changes recommended actions section of this Plan) and/or contribute to the industrial environment of the Duwamish M and I Center,</p> <p>B. Demonstrate the legitimate need for the <u>proposed site and scale of development</u> size and have realistic plans for full use of the proposed facility at the time that occupancy is permitted <u>(the intention of this criterium is to support the policy to limit the location of non-industrial public facilities and is explicitly</u></p>	<p>LU-6 Criteria for Location of Public Facilities. Adopt a <u>policy</u> definition for limiting public facilities in the Duwamish M and I Center in the Comprehensive Plan and Land Use Code. In order to be a permitted public facility use, the following criteria must be met:</p> <p>A. Be industrial uses that meet the recommended M and I Center Plan definition of industry (as defined in Code Amendments and Regulatory Changes recommended actions section of this Plan) and/or contribute to the industrial environment of the Duwamish M and I Center,</p> <p>B. Demonstrate the legitimate need for the size and have realistic plans for full use of the proposed facility at the time that occupancy is permitted</p> <p>C. Not be used to provide services or meeting spaces for the general public as a significant part of the intended use,</p>

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<p>not to subvert real estate negotiations),</p> <p>C. Not be used to provide services or meeting spaces for the general public as a significant part of the intended use,</p> <p>D. Notify all property owners within the M and I Center about the proposed changes.</p>	<p>D. Notify all property owners within the M and I Center about the proposed changes.</p>
<p>LU-7 Definition of Industry. Adopt the following definition of industry as the working and referenced definition of industry and industrial uses in the City's Land Use Code and Comprehensive Plan to clarify appropriate industrial uses. Amend the Code to include the following definition:</p> <p>For the purpose of land use code interpretation, the intent of industrial zoning is to affirm the compatibility of infrastructure requirements, services, and regulatory support necessary to sustain industrial economic vitality and the ability to provide family wage jobs. This interpretation shall include the recognition that industrial activities are typically not compatible with office, retail, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for public services and negatively impacting industry's ability to sustain its employment base. The objective of industrial zoning shall be the segregation of business activity based upon compatible uses and impacts as well as utility and infrastructure requirements.</p> <p>Industrial activities shall be defined and characterized as the manufacture, assembly, storage, repair, distribution, research/development and transportation of materials, goods, and finished products including <u>advanced technologies</u>, commercial fishing and resource extraction and handling. The movement of trucks, trains, ships, airplanes, and nighttime as well as daytime business operations are integral to this activity. Industrial air, noise, and light emission, while within legal limits, are often greater than those found in office,</p>	<p>LU-7 Definition of Industry. Adopt the following definition of industry as the working and referenced definition of industry and industrial uses in the City's Land Use Code and Comprehensive Plan to clarify appropriate industrial uses. Amend the Code to include the following definition:</p> <p>For the purpose of land use code interpretation, the intent of industrial zoning is to affirm the compatibility of infrastructure requirements, services, and regulatory support necessary to sustain industrial economic vitality and the ability to provide family wage jobs. This interpretation shall include the recognition that industrial activities are typically not compatible with office, retail, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for public services and negatively impacting industry's ability to sustain its employment base. The objective of industrial zoning shall be the segregation of business activity based upon compatible uses and impacts as well as utility and infrastructure requirements.</p> <p>Industrial activities shall be defined and characterized as the manufacture, assembly, storage, repair, distribution, research/development and transportation of materials, goods, and finished products including commercial fishing and resource extraction and handling. The movement of trucks, trains, ships, airplanes, and nighttime as well as daytime business operations are integral to this activity. Industrial air, noise, and light emission, while within legal limits, are often greater than those found in office, retail, or residential areas.</p>

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retail, or residential areas.	
<p>LU-9 Definition of Research and Development. Amend the Land Use Code to adopt the following definitions for research and development as a means of determining whether the proposed use qualifies as a permitted use in IG2 and IG1 zones. No changes are proposed for the IC zones.</p> <p>Research and development uses shall be defined and characterized as any analytical or investigational process or application directly related to, or in support of, the manufacture, assembly and repair of materials, tangible and substantial goods, or finished products.</p> <p>IG1- Research and Development: Allow Research and Development uses in the IG1 zone if they meet the following definition:</p> <p>A. Meets Criteria A for IG2 zones, and one or more of the following:</p> <p>B. The Research and Development facility must be integrally related to the creation, manufacture, assembly or repair of materials, tangible goods or finished products and consistent with the definition of industry recommended in the M and I Center Plan; and/or</p> <p>C. Existing Research and Development facilities may be expanded only if they are accessory to or supportive of an industrial process based on the definition of industry recommended in the M and I Center Plan; and/or</p> <p>D. The Research and Development application incorporates or requires the use of materials, chemicals, or other substances or processes generally considered hazardous and/or incompatible with office, retail, or residential zoning, including air, noise, and light emissions; and/or</p> <p>E. The use would be permitted outright in buildings greater than 125,000 square feet in size which were existing as of January 1, 1998, with the stipulation that all operations must take place within the existing building and the existing structure cannot be expanded beyond current size or floor area</p>	<p>LU-9 Definition of Research and Development. Amend the Land Use Code to adopt the following definitions for research and development as a means of determining whether the proposed use qualifies as a permitted use in IG2 and IG1 zones. No changes are proposed for the IC zones.</p> <p>Research and development uses shall be defined and characterized as any analytical or investigational process or application directly related to, or in support of, the manufacture, assembly and repair of materials, tangible and substantial goods, or finished products.</p> <p>IG1- Research and Development: Allow Research and Development uses in the IG1 zone if they meet the following definition:</p> <p>A. Meets Criteria A for IG2 zones, and one or more of the following:</p> <p>B. The Research and Development facility must be integrally related to the creation, manufacture, assembly or repair of materials, tangible goods or finished products and consistent with the definition of industry recommended in the M and I Center Plan; and/or</p> <p>C. Existing Research and Development facilities may be expanded only if they are accessory to or supportive of an industrial process based on the definition of industry recommended in the M and I Center Plan; and/or</p> <p>D. The Research and Development application incorporates or requires the use of materials, chemicals, or other substances or processes generally considered hazardous and/or incompatible with office, retail, or residential zoning, including air, noise, and light emissions; and/or</p> <p>E. The use would be permitted outright in buildings greater than 125,000 square feet in size which were existing as of January 1, 1998, with the stipulation that all operations must take place within the existing building and the existing structure cannot be expanded beyond current size or floor area</p>

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<p>ratio. IG2- Research and Development: Allow Research and Development uses in the IG2 zone if they meet the following definition of Research and Development: A. "Research and Development uses shall be defined and characterized as any analytical or investigational process or application directly related to, or in support of, the manufacture, assembly and repair of materials, tangible and substantial goods, or finished products."</p>	<p>ratio. IG2- Research and Development: Allow Research and Development uses in the IG2 zone if they meet the following definition of Research and Development: A. "Research and Development uses shall be defined and characterized as any analytical or investigational process or application directly related to, or in support of, the manufacture, assembly and repair of materials, tangible and substantial goods, or finished products."</p>
<p>LU-11 Changes to Permitted Uses in the Land Use Code. Amend the Land Use Code to prohibit the following uses in IG1 and IG2 zones. (Please refer to the Plan Appendices Land Use Summary Matrix at the end of this Chapter to identify in greater detail proposed changes, conditions, size of use restrictions, time limits on allowable uses, permitted accessory uses, and other commentary.)</p> <p>Proposed Additional Prohibited Uses in IG1</p> <ul style="list-style-type: none"> • Medical Services • Animal Health Uses, • Auto Sales and Rental, • Lodging, • Mortuary, • Principal Use Parking • Performance Arts Center, • Spectator Sports Facility, • Lecture/Meeting Halls • Personal Transportation Services, • Transit Vehicle Base, • Institute for Advanced Study, 	<p>LU-11 Changes to Permitted Uses in the Land Use Code. Amend the Land Use Code to prohibit the following uses in IG1 and IG2 zones. (Please refer to the Plan Appendices Land Use Summary Matrix at the end of this Chapter to identify in greater detail proposed changes, conditions, size of use restrictions, time limits on allowable uses, permitted accessory uses, and other commentary.)</p> <p>Proposed Additional Prohibited Uses in IG1</p> <ul style="list-style-type: none"> • Medical Services • Animal Health Uses, • Auto Sales and Rental, • Lodging, • Mortuary, • Principal Use Parking • Performance Arts Center, • Spectator Sports Facility, • Lecture/Meeting Halls • Personal Transportation Services, • Transit Vehicle Base, • Institute for Advanced Study,

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<ul style="list-style-type: none"> • Private Clubs <u>except union halls</u>, • Museums <u>except in historic buildings</u>, • Primary and Secondary Schools, • Community Center • Community Club, • Hospitals, • Religious Facilities, • Universities, • Park and Pool Lots, • Motion Picture Theaters • Parking structures as principal use. <p>Proposed Additional Prohibited Uses in IG2</p> <ul style="list-style-type: none"> • Animal Health Uses, • Auto Sales and Rental, • Lodging, • Mortuary, • Performance Arts Center, • Spectator Sports Facility <u>if applied for after June 23, 1999</u>, • Motion Picture Theater, • Personal Transportation Services, • Transit Vehicle Base, • Institute for Advanced Study, • Private Clubs <u>except in union halls</u>, • Museums <u>except in historic buildings</u>, • Primary and Secondary Schools, • Colleges, • Community Center, • Community Club, 	<ul style="list-style-type: none"> • Private Clubs, • Museums, • Primary and Secondary Schools, • Community Center • Community Club, • Hospitals, • Religious Facilities, • Universities, • Park and Pool Lots, • Motion Picture Theaters • Parking structures as principal use. <p>Proposed Additional Prohibited Uses in IG2</p> <ul style="list-style-type: none"> • Animal Health Uses, • Auto Sales and Rental, • Lodging, • Mortuary, • Performance Arts Center, • Spectator Sports Facility, • Motion Picture Theater, • Personal Transportation Services, • Transit Vehicle Base, • Institute for Advanced Study, • Private Clubs, • Museums, • Primary and Secondary Schools, • Colleges, • Community Center, • Community Club,

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<ul style="list-style-type: none"> • Hospitals, • Universities, • Parking structures. <p><u>Items needing further study before a recommendation is made:</u> <u>IG1 Principal use parking around the new stadium.</u></p>	<ul style="list-style-type: none"> • Hospitals, • Universities, • Parking structures.
<p>LU-12 Size of Use Restrictions in the Duwamish M and I Center. Amend the Land Use Code to adopt the following size of use amendments in IG1 and IG2 zones. The size restrictions apply to rentable building space, not building footprint.</p> <p>Size of Use Restrictions in IG1</p> <ul style="list-style-type: none"> • Commercial uses including retail, service, and office not integral to an allowed use is restricted to <u>25,000</u> 40,000 square feet (sf) in size, • Fast food and restaurants limited to 5,000 sf., • Taverns limited to 2,000 sf., • Brewpubs limited to 2,000 sf for the pub portion of the use. <p>Size of Use Restrictions in IG2</p> <ul style="list-style-type: none"> • Commercial uses including retail, service, and office not integral to an allowed use is restricted to <u>50,000</u> 20,000 sf., • Taverns limited to 2,000 sf., • Lecture/Meeting Halls limited to 5,000 sf., and • Unlimited office allowed in buildings larger than 125,000 sf. existing as of January 1998. 	<p>LU-12 Size of Use Restrictions in the Duwamish M and I Center. Amend the Land Use Code to adopt the following size of use amendments in IG1 and IG2 zones. The size restrictions apply to rentable building space, not building footprint.</p> <p>Size of Use Restrictions in IG1</p> <ul style="list-style-type: none"> • Commercial uses including retail, service, and office not integral to an allowed use is restricted to 10,000 square feet (sf) in size, • Fast food and restaurants limited to 5,000 sf., • Taverns limited to 2,000 sf., • Brewpubs limited to 2,000 sf for the pub portion of the use. <p>Size of Use Restrictions in IG2</p> <ul style="list-style-type: none"> • Commercial uses including retail, service, and office not integral to an allowed use is restricted to 20,000 sf., • Taverns limited to 2,000 sf., • Lecture/Meeting Halls limited to 5,000 sf., and • Unlimited office allowed in buildings larger than 125,000 sf. existing as of January 1998.
<p>LU-18 Consider an Amendment to the Shoreline Master Program</p> <p><u>Consider extending the water-dependency requirements beyond the current 200' shoreline jurisdiction on the Duwamish waterway in the areas north of South Park.</u></p>	

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<p>LU-20 49 First Avenue South Area Rezone. Adopt a rezone from IG2 to a modified IC Zone for the 1st Ave. S. Area bounded by First Ave. S., Railroad Ave. S., Western Ave., S. Royal Brougham, Utah Ave. S., S. Massachusetts St., Occidental Ave. S., and S. Atlantic St. as shown on Figure 3-3. <u>(The boundary of the First Avenue South Area Rezone should be evaluated for potential expansion after construction of the two new stadiums and both phases of SR519 are completed and their cumulative impacts can be analyzed.)</u> Use the 3.0 Floor-to-Area-Ratio and keep the existing 85-foot height limit. Maintain the M and I Center Boundaries; do not change Downtown Urban Center Boundaries. Keep the currently permitted and prohibited uses in the IC Zone except for the following:</p>	<p>LU-19 First Avenue South Area Rezone. Adopt a rezone from IG2 to a modified IC Zone for the 1st Ave. S. Area bounded by First Ave. S., Railroad Ave. S., Western Ave., S. Royal Brougham, Utah Ave. S., S. Massachusetts St., Occidental Ave. S., and S. Atlantic St. as shown on Figure 3-3 Use the 3.0 Floor-to-Area-Ratio and keep the existing 85-foot height limit. Maintain the M and I Center Boundaries; do not change Downtown Urban Center Boundaries. Keep the currently permitted and prohibited uses in the IC Zone except for the following:</p>
<p>LU-21 20 Georgetown- Seattle Design/Gift Center. <u>Consider after further analysis.</u> Change zoning in the area around the Seattle Design Center, Seattle Gift Center and Northwest Industrial Park from C1 and IG2 to IC.</p>	<p>LU-20 Georgetown- Seattle Design/Gift Center. Change zoning in the area around the Seattle Design Center, Seattle Gift Center and Northwest Industrial Park from C1 and IG2 to IC.</p>
<p>LU-21 Zoning Name Change. Amend the Land Use Code to rename the IB zone as Light Industry (LI). No other changes with respect to permitted uses, development regulations, or other code considerations are recommended.</p>	<p>LU-21 Zoning Name Change. Amend the Land Use Code to rename the IB zone as Light Industry (LI). No other changes with respect to permitted uses, development regulations, or other code considerations are recommended.</p>
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TRANSPORTATION	
<p>TP-30 Traffic Management in Transitional Residential / Industrial Areas Implement traffic management measures in transitional residential/ industrial areas, and through improvements identified in truck circulation and local access to regional facilities, truck impacts would be significantly minimized in residential areas (Reference Code: G-12) Improve the safety and minimize truck impacts in residential areas immediately adjacent to industrial districts through traffic management treatments at the following locations:</p>	<p>TP-30 Traffic Management in Transitional Residential / Industrial Areas Implement traffic management measures in transitional residential/ industrial areas, and through improvements identified in truck circulation and local access to regional facilities, truck impacts would be significantly minimized in residential areas (Reference Code: G-12) Improve the safety and minimize truck impacts in residential areas immediately adjacent to industrial districts through traffic management treatments at the following locations:</p>

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Addendum

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TRANSPORTATION

- 8th Avenue S, north of Director Street to Cloverdale
- 8th Avenue S/9th Avenue S, south of Cloverdale Street to SR 99
- ~~Modify S Corson Avenue between S Michigan Street and E Marginal Way to provide buffer zone between the roadway and the residential neighborhood.~~

- 8th Avenue S, north of Director Street to Cloverdale
- 8th Avenue S/9th Avenue S, south of Cloverdale Street to SR 99
- Modify S Corson Avenue between S Michigan Street and E Marginal Way to provide buffer zone between the roadway and the residential neighborhood.

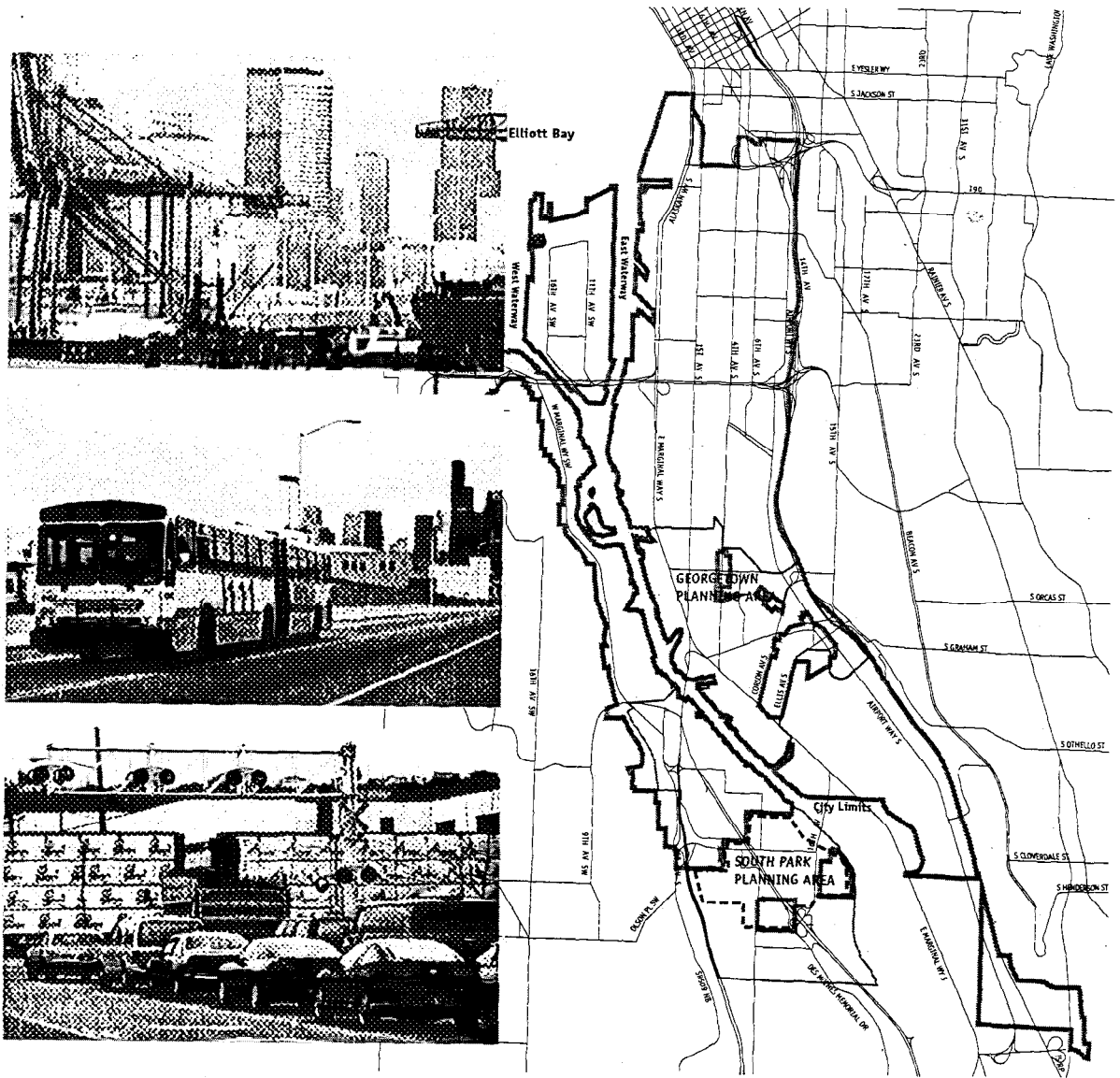
ENVIRONMENTAL REMEDIATION

ER-5 Salmon Habitat

The City and Port of Seattle should work together to return Puget Creek, which opens into the estuary from publicly owned land in the vicinity of Terminal 107 and which presently runs into the Renton Sewer, to a more natural course for the purpose of enhancing the salmon habitat.

OTHER RECOMMENDATIONS

The Greater Duwamish Planning Committee should proceed, as previously voted, to incorporate as a non-profit and steward the implementation of the M&I Center Plan.



Greater Duwamish Manufacturing and Industrial Center Plan

April 27, 1999



**GREATER DUWAMISH
PLANNING COMMITTEE**

April 29, 1999

To all Greater Duwamish Business Owners, Property Owners, Employees and others with an interest in this industrial area:

We are pleased to present the Greater Duwamish Manufacturing and Industrial Center plan. This plan is the culmination of thousands of hours of volunteer work contributed by a wide variety of Duwamish area Stakeholders over the past four years. It also represents the considerable efforts of our consulting teams and the input of various City and County agencies. The intent of the plan is to maintain and enhance the viability of our industrial area and to protect its vital employment base. We encourage your comments and recommendations on these proposals before we finalize the plan and present it to the Seattle City Council.

To listen to your comments and answer your questions, we will be holding two Duwamish wide meetings. The first, to be held May 21 from 8:00 - 10:00 a.m. at the Pyramid Ale House, 1201 First Avenue South, will focus on the stadium area rezone (see p. 53) and other land use issues. The May 26th meeting from 8:00 - 10:00 at the Seattle Public Utilities 2nd floor lecture hall, 710 Second Avenue, will be for set up to respond to your questions, listen to your comments on the plan and how you think it could be strengthened. If you can not attend either of these meetings, you may fax your comments to Jill Novak at 233-0047, David Huchthausen at 624-3839 or E-Mail them at <Jill.Novik@ci.seattle.wa.us> or <somerset@emeraldnet.net>.

Thank you in advance for your support of these efforts.

David Huchthausen - Co-chair

Bill Vivian - Co-Chair

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Note Regarding Sound Transit

The GDPC has expressed its opposition to both the C-1 rail route and the M-1 maintenance yard alternative, based on significant cumulative impacts to the land use, transportation, and freight mobility in the Greater Duwamish Manufacturing and Industrial Center. See Appendix D: Correspondence with Sound Transit.

APPENDIX A: Policy Directives for the M and I Center Plan

APPENDIX B: Transportation Analysis (bound in a separate document)

APPENDIX C: Jobs and Economic Analysis (bound in a separate document)

APPENDIX D: Correspondence with Sound Transit

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Executive Summary

Purpose

This plan recommends specific goals and policies intended to ensure the viability and expansion of manufacturing and industrial activity in the Greater Duwamish Manufacturing and Industrial Center (M & I Center). These recommendations are intended to support and implement the following objectives:

- Restrict incompatible or competing land uses within the M & I Center;
- Encourage manufacturing and industrial job retention and growth;
- Establish a growth target of 10,860 new family wage industrial jobs;
- Retain and improve access to, and transportation within, the M & I Center; and
- Retain existing businesses and encourage new manufacturing and industrial development within the M & I Center.

Organization

Recommendations are organized within the following categories:

- Jobs and Economic Development,
- Land Use,
- Transportation,
- Utilities,
- Environmental Issues, and
- Public Safety.

Jobs and Economic Development

The Duwamish M & I Center provides the largest concentration of family wage jobs in the Puget Sound region, generating enormous tax and export revenues. In 1997 there were 3,300 businesses providing more than 60,000 jobs within its boundaries. These jobs pay the substantially higher than average wages required to support a family, yet many are accessible to people with lower levels of formal education and to those who speak English as a second language. This valuable employment base must be preserved.

Land Use

The viability of Industrial land within the M & I Center is under increasing pressure from a variety sources, including conversion to commercial and incompatible uses, the development of waterfront property for public access, and the increased acquisition of industrial land by Governmental entities, often for conversion to non industrial uses. Conversion of industrial land to incompatible uses not only removes the site from industrial use but adversely impacts the surrounding industrial users by increasing land values and lease rates. Such development generates additional vehicular and pedestrian traffic, reducing available parking, access to local business, and placing increased pressure on already congested arterials and thoroughfares

vital to freight mobility. This plan strongly recommends increasing restrictions on allowable uses in General Industrial zones (IG1 and IG2). Proposed prohibited uses are listed on page 50.

Transportation

The M & I Center is a vital international trade and transportation cross-roads, receiving and distributing goods via roadway, water, rail and air. Its ability to provide multiple modes of transportation represents a unique asset to the region and an enhancement to the local business environment. Unfortunately these modes of transportation often conflict with one another, increasing traffic congestion, particularly along east to west arterials. These problems are exacerbated by non-industrial uses in the area and increased commuter through traffic. These incompatible uses create specific transportation and circulation problems that directly conflict with industrial priorities. The plan recommends a prioritized set of proposals designed to improve transportation and freight mobility throughout the M and I Center.

Utilities

The Duwamish M & I Center has been in industrial use for nearly 100 years. Changes in technology and the growth of industrial activity require an increased public utility infrastructure to meet the needs of industrial and manufacturing processes. High electrical capacity and low electrical rates have provided an important incentive for industrial firms to remain in or relocate to the M & I Center. Policies to ensure an adequate supply of electricity and preferential rates for industry are essential to the viability of the M & I Center. Storm water management and drainage issues are significant and continuing problems that must be addressed.

Environmental Issues

The issue of industrial land contamination seriously threatens the viability of many land parcels within the M & I Center. According to the King County Assessor's Office most of the City's industrial land may be considered contaminated under current standards. "Clean-up" and redevelopment of these contaminated sites has proved very costly and often results in the conversion of the land to non industrial uses to justify the cost of the remediation work.

Public Safety

Traffic control violations and auto break ins are the most frequent police incidents reported in the M & I Center. Theft of industrial materials, tools and equipment is also a significant issue for many M & I Center firms since industrial facilities, by their nature, are more difficult to secure than some other types of businesses.

Major Recommendations of the Plan

Pol. EC 1.6 Preserve land in the Duwamish M & I Center for industrial activities such as manufacturing, warehousing, marine uses, transportation, utilities, construction and other related industrial sectors.

Pol. EC 3.2 Discourage non-industrial uses.

- Pol. EC 3.4 Maintain the existing M & I Center boundaries.
- Pol. EC 3.5 Separate industrial processes and functions from residences and the general public.
- Pol. EC 3.6 Address the impacts of sports/exhibition facilities.
- Pol. EC 4.5 Within 200 feet of the Duwamish waterway shoreline, water dependent and industrial uses shall be the highest priority in the Land Use Code and Master Program.
- Pol. EC 4.7 Prepare a Programmatic Environmental Impact Statement (EIS) for M & I Center which identifies appropriate land use, levels and thresholds for site specific environmental analyses and clean-up.
- Act. EC-2 Adapt a new definition of Industry and incorporate it into Seattle's Land Use Codes. (see page 25 for new definition)
- Act. EC-3 Simplify and Streamline the Industrial Permitting Process.
- Goal LU 3 Preserve a working industrial waterfront that retains and expands the value of the Duwamish Waterway as a vital resource that provides important local family-wage job base and economic growth for the City County, region and State.
- Pol. T 2.1 Grade separate major east-west corridors within the M & I Center to reduce or eliminate conflicts between vehicular and rail modes and to improve safety and mobility for pedestrians, bicycles, vehicles and trucks.
- Pol. T 3.1 Maintain and improve east-west mobility throughout the area, particularly along three east-west freight corridors: Royal Brougham Way (SR519), Spokane Street and Michigan Street.
- Pol. T 3.5 Improve turning radii for truck movements at key intersections and along key corridors to enhance freight mobility.
- Pol. T 7.4 Maintain access to local spur rail lines.
- Pol. T 10.1 Preserve access for air cargo and air operators at the King County Airport.
- Pol. T 10.2 Work with King County to maintain or expand air capacity at the King County Airport.
- Pol. UT 1.3 Maintain competitive electrical rates for industrial customers.
- Pol. UT 1.4 Provide adequate storm water facilities in areas where deficiencies currently exist.

The cumulative impacts of major construction projects, explosive regional growth and a seriously congested transportation system have degraded the viability of the Duwamish M & I Center over the past decade. Continued and intensified pressure to redevelop industrial land for non-industrial purposes is the most significant threat to this vital resource. If the M & I Center is to remain viable, it is imperative that Governmental decision makers become educated on issues affecting the M & I Center and that all elements of City and County government take a proactive role in defending the M & I Center from further destabilization. This plan provides the basic elements necessary for Seattle to retain this valuable economic asset well into the twenty-first century, provided there is sufficient political will to follow through with its recommendations.

Introduction

The Greater Duwamish Manufacturing and Industrial Center Plan

The Greater Duwamish Manufacturing and Industrial Center was created in 1994 through adoption of the 20-year Seattle Comprehensive Plan. The Greater Duwamish Manufacturing and Industrial Center (M and I Center) and the Ballard/Interbay Northend Manufacturing and Industrial Center (BINMIC) are the only two such manufacturing and industrial centers in the entire city. The City subsequently established the Neighborhood Planning Program to address population and economic growth for the City as a whole and for specific areas within the City, including the Duwamish M and I Center.

This Plan has been prepared in support of a city land use planning effort focused on the designated Manufacturing and Industrial Center located in the Duwamish Valley between downtown Seattle and the Ring County Airport.

This Plan contains separate sections which address jobs and economics, land use, transportation, utilities, environmental remediation, and public safety. Conclusions and recommendations for each topic are presented separately within each chapter of the Plan.

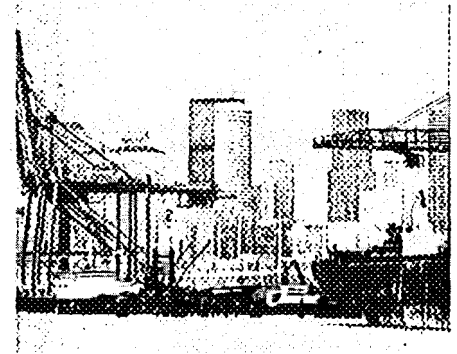
The primary purpose of the Duwamish M and I Center Planning process is to create a plan that supports and implements the following goals and policies:

- Analyze the ability to achieve the growth target of 10,860 new family wage industrial jobs, and promote policies to encourage manufacturing and industrial retention and growth;
- Restrict incompatible or competing land uses in the industrial areas;
- Retain and improve access to industrial areas and transportation routes within these areas;
- Encourage the aggregation of smaller parcels of land into sites suitable for manufacturing and industrial use when not in conflict with established transportation corridors or access to east-west arterials.

The M and I Center Plan grew out of the North Duwamish Neighborhood Plan, Phase 1; which identified past, present, and future issues to be addressed in Phase 2 (the M and I Center Plan). Public outreach was conducted to involve stakeholders and to provide information and education about the importance of the manufacturing and industrial areas. Phase 2, this M and I Center Plan, developed this set of analyses and recommendations to achieve the project goals and to identify implementation actions.

The land use component of this Plan has four primary purposes:

1. To verify the M and I Center Plan's consistency with the Seattle Comprehensive Plan and promote appropriate changes;
2. Proposals to enhance the viability of the M and I Center;
3. To **identify** any inconsistencies between the city's industrial policies and its zoning and development standards; and



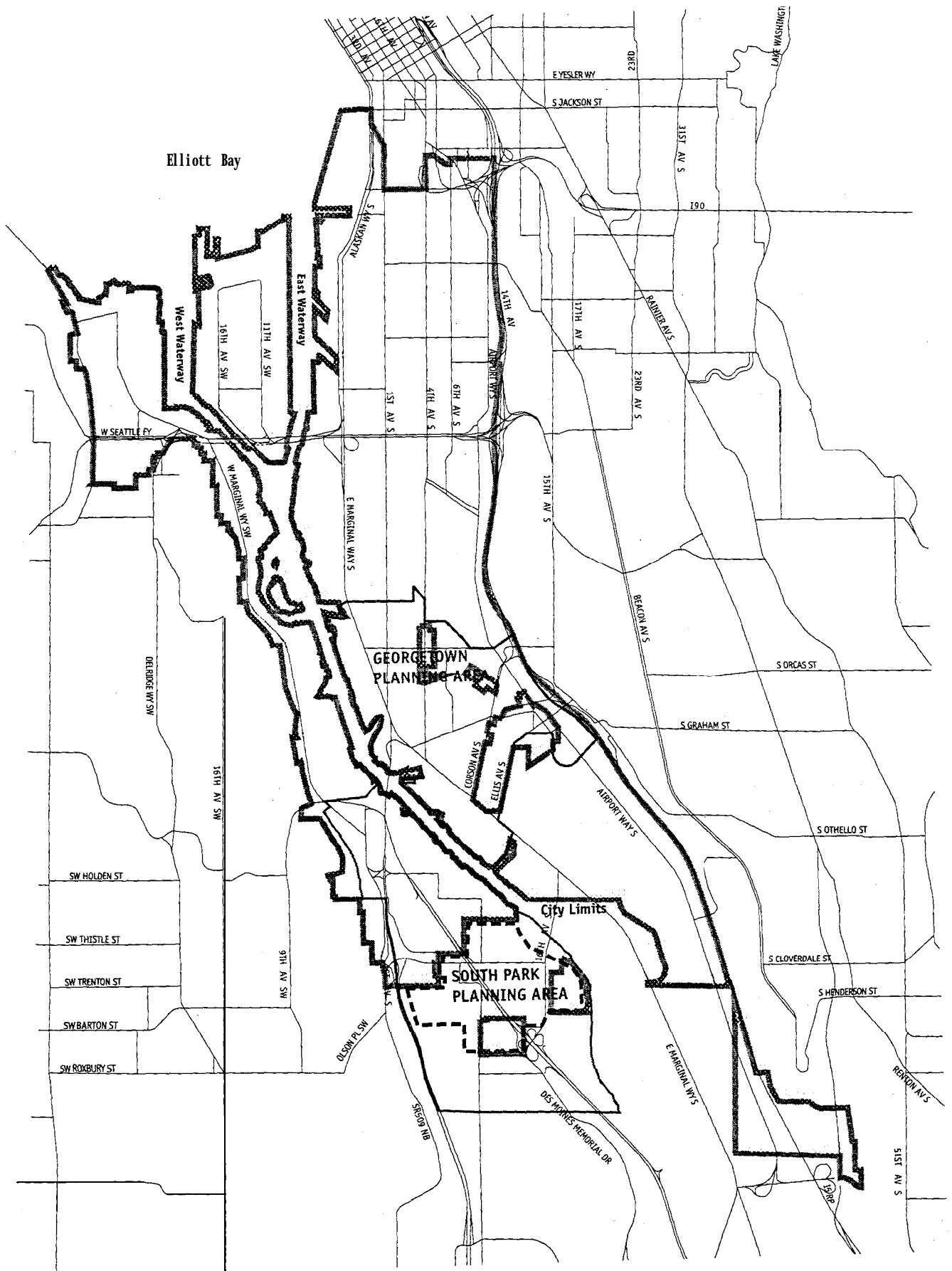


Figure 1-1: Greater Duwamish Manufacturing and Industrial Center Boundary

4. To determine whether the current Duwamish M and I Center boundaries are appropriate and suggest whether the boundaries should be changed.

Information was obtained through meetings and discussions with representatives of the Seattle Office of Management and Planning and the Neighborhood Planning Office. The Plan also contains information gathered through the public outreach program, including opinions and recommendations of property owners, M and I Center constituents, and other stakeholders.

Greater Duwamish Planning Committee

The GDPC represents constituent groups in the M and I Center, including heavy and light industry, marine industry, commercial businesses, artists' live/work housing, the Port of Seattle, Burlington Northern Santa Fe railroad, the Boeing Company, the trucking and construction industries, and the SODO, Georgetown and South Park Business Associations.

Purview of the Plan

The M and I Center Plan was developed by the Greater Duwamish Planning Committee (GDPC), a group of volunteer citizens representative of a wide range of industrial and commercial businesses and government interests (and other constituencies) in the M and I Center. The Plan was funded primarily by the City of Seattle, with contributions from the Port of Seattle, Boeing, the Public Facilities District, and First and Goal.

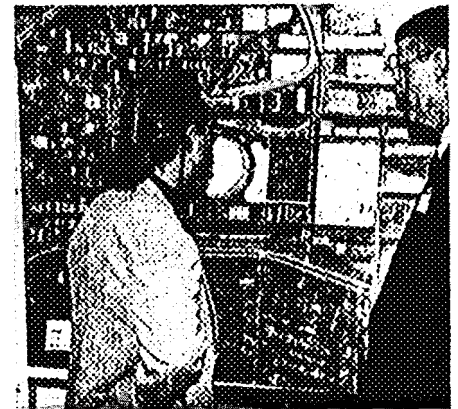
The Greater Duwamish M and I Center Plan is the product of the second phase of the planning process, evolving from the North Duwamish Neighborhood Plan. In order to do more cohesive analyses and planning, the planning area for Phase 2 (this Plan) was expanded to include the entire M and I Center. Phase 1 priorities which came from public input were Transportation, Economic Development, Land Use and Zoning, and (the need to address) the cumulative impacts of large scale projects in the M and I Center.

Technical analyses of economics and jobs, land use, and transportation were performed by the consultant team to provide information and analysis for the major plan elements.

Community Participation

This M and I Center Plan was prepared with the input of hundreds of citizens over the past 3 years. During this phase, community input was gathered in the following ways:

- Three "Big Events" (summer 1998), where participants responded to questions soliciting their preferences about land use, transportation, zoning, and other topics;
- Newsletters mailed to every business in the M and I Center, asking for participation and input;
- Informational presentations to affected groups such as the SODO Business Association, the Georgetown Business Association, and the South Park Business Association;
- Questionnaires mailed to every business in the M and I Center; and
- Coordination with and preliminary recommendations from the Manufacturing and Industrial Council.



Plan Review and Approval - Process/Next Steps

This draft Plan will go through extensive review and revision before being forwarded to the Seattle City Council for approval. Reviews will include:

- Mailer to be sent to every business and property owner in the M and I Center,
- Public meetings and opportunities for public comment on Draft Plan to be held in the spring of 1999,
- Full GDPC review and revise proposed plan in light of public comments,
- City of Seattle executive review and response,
- City Council public hearing and review, and
- Adoption of policy recommendations.

Role and Function of the M and I Center

Regional Significance of the Greater Duwamish Manufacturing and Industrial Center

The regional significance of the Greater Duwamish Manufacturing and Industrial Center to the City of Seattle and the Puget Sound Region cannot be overemphasized. Comprised of some 4,138 acres of marine and industrial lands (City of Seattle, 1998), the Greater Duwamish Manufacturing and Industrial Center (M and I Center) is a unique regional resource and economic engine. The viability of the M and I Center is currently challenged by developmental pressure, lack of infrastructure, and changing trends in industry and employment. The proposals in this plan are intended to protect, preserve, and enhance industrial viability. The M and I Center must not only preserve the existing land base but also be prepared to meet the needs of industry in the 21st century.

Bounded by I-5 on the east, West Seattle on the west, Downtown Seattle to the north, and Boeing and the City of Tukwila on the south, the Greater Duwamish Manufacturing and Industrial Center is one of five manufacturing and industrial Centers within the Puget Sound Region. As one of the two designated M and I Centers in the City of Seattle, the Duwamish M and I Center represents 84 percent of the industrial lands within the City.

Irreplaceable Industrial and Marine Land Base

Due to regional and global changes in industry and employment, the total land area devoted to industrial and water-dependent uses has declined significantly in Seattle in the last decades, increasing the importance of this limited and unique industrial resource. Because of these changing economic trends and pressure to convert industrial lands to other commercial uses, the Duwamish M and I Center needs to be preserved and protected in perpetuity from ongoing pressures. The M and I Center needs both land use protection and infrastructure improvements to ensure that the existing jobs and revenue base are preserved and that the M and I Center can attract and support new family-wage jobs to the City of Seattle.

While commercial and residential uses can occur in a large variety of zones throughout the City and Region, industrial uses are extremely limited geographically, with few options to expand the existing industrial land base,

making the preservation of this scarce resource all the more imperative. In addition, the marine industrial lands within the M and I Center are the regional center for shipping and trade with the Pacific Rim. This resource cannot be duplicated if marine lands are converted to nonindustrial uses (as has occurred elsewhere in the region).

The pressure to convert to nonindustrial uses has increased dramatically in the 1990s and is likely to continue to increase into the foreseeable future without active intervention. Factors contributing to the increasing conversion pressure include the general strength of the local and national economies, the M and I Center's proximity to downtown, the low vacancy rates in nonindustrial zones, and the current land use code which permits large scale nonindustrial uses. In addition, the Duwamish M and I Center has been an industrial area for a very long time and suffers from changes in standards of use, leaving most sites with some level of environmental contamination. In some cases, industrial businesses have deferred maintenance and improvements, leaving facilities in need of enhancements or modernization.

Assets of the M and I Center

At the same time, the M and I Center has a number of assets which have kept it viable and which continue to make the Center attractive to industry, including low electrical rates, access to water (for transportation and the seafood processing/storage industry), access to multi-modal transportation (freeways, highways, rail, harbor facilities, and airports), proximity to Boeing corporate headquarters, Boeing research facilities, and the Boeing Renton assembly plants, access to a large pool of highly-skilled industrial workers, and access to an even larger pool of potential entry-level workers. City policies and actions need to build upon these long-term assets to support business growth and family-wage jobs.

Employment Base

The Greater Duwamish Manufacturing and Industrial Center supports a major portion of the employment in the Puget Sound region. In 1997 there were approximately 60,700 jobs in the Duwamish Manufacturing and Industrial Center, with the majority of these jobs in the heavy and light industrial categories (which include manufacturing, transportation/communications/utilities and wholesale trade). Together, these industrial jobs represent approximately 67 percent of employment in the Duwamish M and I Center.

(Additional detail about jobs and employment is provided in Appendix B).

Revenues Generated in the M and I Center

Revenues generated in the Duwamish bear a significance far greater than simply a tally of payrolls. The industrial employment sector typically generates more economic impacts than other types of businesses. For example, according to the IMPLAN model for King County, the multiplier for retail employment ranges from 1.34 to 1.61. This means that for every job in the retail sector, another 0.34 to 0.61 jobs are created. Industrial sectors have multipliers averaging between 1.72 for the boat and ship building & repairing sector and a multiplier of 2.80 for the water transportation sector.

The total impact from wages paid in the retail sector is also substantially less than the wage impact of other industry sectors. In the retail sector, the wage multiplier for eating & drinking establishments is 1.64, meaning that for every \$1.00 paid in wages to restaurant workers, another \$0.64 in wages are generated across all industry sectors. Industrial sectors have multipliers ranging between 1.66 for the wholesale industry sector and 2.58 for the motor freight transportation sector. The hotels & lodging sector is similar to the food service sector, with a wage multiplier of 1.68, and most other services fall in the range of 1.30 to 1.90.

The Duwamish Waterway is an important transportation corridor with regional and national significance and the lifeline to Southeast and Western Alaska. Domestic and international traffic via the waterway amounts to approximately 7.2 million tons, valued at approximately \$7.5 billion. In addition, most of the products bound for Alaska originate in the Seattle area, which increases the economic significance of the waterway to the City of Seattle and King County.

The Duwamish industrial area is an extremely important employment base and revenue generator for the City's budget with annual tax revenues of approximately \$67 million. The economic development strategy for the Duwamish industrial area is designed to recognize, foster and protect this important employment and tax base, generating:

- Approximately \$19.5 million in property taxes, which represents four percent of overall property taxes collected in the City of Seattle;
- Approximately \$1.2 million in leasehold taxes by tenants of the Port of Seattle; and
- Approximately \$46 million in sales/use and B & O taxes, representing 21 percent of such taxes collected in the City of Seattle.

Family- Wage Jobs

A key goal of the Seattle Comprehensive Plan is to "keep family-wage manufacturing jobs from leaving the city". The City has several goals to accomplish this:

- To enhance the region's economic prosperity and accommodate a reasonable share of the region's economic growth;
- To increase opportunity and equity for the city's distressed communities, raise personal incomes, and increase tax revenues; and
- To promote Seattle's involvement in the emerging global economy by creating a positive environment for international trade.

To actively promote an employment environment that provides livable wage jobs and the education and skill-building opportunities to ensure employability for community members. It is very important to recognize the contribution that industry makes in terms of providing a large number of well paid "livable or family" wage blue-collar jobs. The jobs which are located in the M and I Center represent not only employment numbers, but jobs which pay substantially higher wages than the average wage in King County. Emphasis has been placed both in existing policy directives and in the preparation of this plan on the preservation and creation of family-wage jobs rather than service sector jobs which do not pay as well.

Industrial family-wage jobs provide additional benefit to the region because they create opportunities for higher-paying employment to people with different levels of formal education and to people who may speak English as a second language.

Investment in industrial jobs benefits the economy in ways that service jobs do not. Industrial jobs generate higher employment throughout the region through the sale and shipment of both raw goods and finished products. Small manufacturers in particular depend upon the local economy for goods and services, thus diversifying the local economy.

Different industry sectors contribute different amounts to the regional economy. Average annual wages are an important consideration in measuring the contribution that industry makes, in terms of providing stable family wage jobs and generating significant local spending and tax revenues. In 1997, the annual average wage in Ring County generated approximately \$37,299, which translates roughly into an hourly wage of above \$18 an hour for full time, year-round employment. Most industrial jobs meet or exceed the average wage:

- Manufacturing jobs averaged \$44,621 or 19.6 percent above the average;
- Transportation & public utilities jobs averaged \$40,801 or 9.4 percent above the average;
- Wholesale trade jobs averaged \$42,197 or 13.1 percent above the average; and
- Construction jobs met the average wage standard (Source: BST Associates).

On the other hand, retail jobs generated slightly more than one-half of the average wage. Although services generated ten percent more than the average in total, hotel workers and personal service workers received an average of only \$18,693 and \$17,695 per year, respectively.

Transportation Crossroads for the Region

The Greater Duwamish Manufacturing and Industrial (M and I) Center is a vital international trade and transportation crossroads, receiving and distributing goods via roadway, water, rail and air. It is home to the Port of Seattle's primary shipping operations, the main Amtrak and freight rail yards for Washington State, and the intersection of major interstate highway routes. Commerce generated throughout the United States and Canada moves through the area on its way to and from Alaska and countries throughout the Pacific Rim, South America, and other areas of the world. The transportation system within the M and I Center plays a crucial role in the movement of these goods and services and holds economic implications for the entire state and Pacific Northwest region. An efficient transportation system is imperative to maintain the economic viability of regional businesses and sustain Puget Sound's family wage industrial job base.

In addition to the significance of this district as a regional and international trade center, most local businesses rely on the available land-base and transportation facilities to manufacture, distribute, and store goods and services for the Puget Sound region and greater Western Washington. As an indicator of this significant component, over 70 percent of the total employ-

ment base within the district is generated by small businesses. As such, the local transportation needs of small industrial businesses within the area weigh heavily in the development of long range transportation solutions and land use decisions for the M and I Center and its regional arterial connections.

*Challenges to Viability **of** the M and I Center*

The M and I Center is located in the very complex heart of Seattle and faces major challenges to its continued viability. Additional challenges include:

- The City of Seattle policies and Land Use Code, which fail to recognize the problems created by allowing incompatible uses in industrial areas, and currently permit a wide variety of such uses;
- The planning and construction of some 28 large development and infrastructure (many of which are nonindustrial) projects in the area without addressing the cumulative impacts of such a large degree of change:
- Transportation bottlenecks and Business and Occupation Tax on inventory, which greatly adds to the cost of doing business in the City of Seattle;
- Uncertainty in permit and development process;
- Lack of a cohesive plan for land use and infrastructure improvements,
- Deferred improvements to basic infrastructure, especially transportation and drainage,
- Changing industrial standards in terms of processes and safety and environmental regulations,
- Changing manufacturing and employment trends, including increased automation,
- Proximity to downtown Seattle, which creates pressure to convert industrial land to commercial uses,
- Complex and burdensome regulatory environment in terms of substance and enforcement,
- Existing soil and groundwater contamination on most M and I Center parcels and prohibitive cost of cleanup,
- Location of nonindustrial public facilities in the industrial area, including two major sports stadiums,
- Need for trained work force,
- Lack of coherent strategies to attract and retain jobs,
- Rising land costs due to increase in nonindustrial uses proximate to downtown,
- Lack of a system in the City of Seattle to determine City tax revenues, which contributes to conversion of privately held industrial land to public facilities uses,
- Lack of larger sites to meet the need of growing industrial businesses,
- Need for more trained economists on City staff.

The designation of the M and I Center in County and City policy, the creation of this Plan, the healthy economy, and ongoing efforts with environmental remediation and of the advocacy of the Manufacturing and Industrial Council all indicate significant political and community will to preserve and expand the viability of the M and I Center.

Although the adopted County-wide Planning Policies and the City of Seattle Comprehensive Plan designate the area as a Manufacturing and Industrial Center, they do not adequately protect it from encroachment of nonindustrial uses. Current land-use codes and their interpretation have not been revised to prohibit the location of significant amounts of nonindustrial land uses to locate in the industrial area. Therefore increasing numbers of permitted nonindustrial uses have continued to locate within the M and I Center, further decreasing options for industrial expansion and development and stimulating significant increases in land costs, making continuation of business difficult for industrial users.

The M and I Center is also home to a number of public facilities. While some generate family-wage jobs, they do not generate both the tax and export revenues generated by private industry.

A recent proposal from the City of Seattle (opposed by the GDPC) would extend the downtown boundary into what is currently the northern end of the M and I Center, thus reducing overall acreage and introducing incompatible nonindustrial uses, such as housing and retail, into the industrial area. These proposals would also bring large numbers of the public into the industrial area, which is largely incompatible with the nature of the industrial land uses. Large numbers of the public bring in automobile traffic, which often conflicts with heavy intermodal freight movements. Also, industrial occupancies, as defined in the building and fire safety codes, are based on the assumption that industrial processes occur in areas not frequented by the general public.

Policy Directives for the M and I Center Plan

The Greater Duwamish Manufacturing Center was designated as such in the adopted county-wide planning policies and the Seattle Comprehensive Plan as part of the Growth Management Planning process. The policies and criteria for their implementation have guided the development of the M and I Center Plan. Applicable policies are summarized below, but can be found in full in Appendix A, Policy Directives for the M and I Center Plan.

County- Wide Planning Policies

The County-Wide Planning Policies were adopted by King County jurisdictions, as mandated by the State Growth Management Act. They became effective when they were ratified by ordinance or resolution by at least 30 percent of the city and county governments, representing 70 percent of the population of King County according to interlocal agreement.

The County-Wide Planning Policies identify Urban and Manufacturing/Industrial Centers (M/I Centers), stating that:

“Manufacturing/Industrial Employment Centers are key components of the regional economy. These areas are characterized by a significant amount of manufacturing, industrial, and advanced technology employment. They

differ from other employment areas, such as **Business/Office** parks in that a **land** base and the segregation of major non-manufacturing uses are essential elements of their operation.” Within the Urban Growth Area, the County-Wide **Planning Policies shall** assure the creation of a number of **locally** determined **Manufacturing/Industrial** Centers which meet **specific** criteria.

Seattle Comprehensive Plan

The Seattle Comprehensive Plan (adopted 1994) implements the County-Wide Planning Policies with its goals and policies that identify and support its two M and I Centers. Comprehensive Plan policies are summarized below:

Manufacturing and Industrial Centers

- (Goal G1) Ensure that adequate accessible industrial land is available to promote a diversified employment base and sustain Seattle’s contribution to the regional high-wage job growth.
- (Goal 31) Distribute the 131,400-146,000 jobs called for in this plan among the various areas of the City as follows:
- Urban Centers 65 percent of job growth,
 - M/I Centers 10 percent of job growth (13,140-14,660 jobs),
 - Urban Villages 15 percent of job growth.
- (Goal 34) Achieve the following 20 year employment targets in M/I Centers:
- North Seattle M/I Center: 3,800 jobs,
 - Duwamish M/I Center: 10,860 jobs.
- L27 Limit in industrial/manufacturing areas commercial or residential uses that are unrelated to the industrial function, that occur at the intensities posing short- and long- term conflicts for industrial uses, or that threaten to convert significant amounts of industrial land to nonindustrial uses. Establish new size of use limits for retail uses in the Industrial Commercial zone.
- L113 Designate industrial areas on the attached Future Land Use Map where:
- The primary function is industrial activity, including industrial uses, advanced technology industries and a wide range of industrial-related commercial functions, such as warehouse and distribution activities.
- L115 Include among appropriate activities manufacturing uses, advanced technology industries and wide range of industrial-related commercial functions, such as warehouse and distribution activities. Of the highest priority are high value-added, high-wage industrial activities.
- L116 Permit commercial uses in industrial areas to the extent that they reinforce the industrial character, and limit specified nonindustrial uses, including office and retail development, in order to preserve these areas for industrial development.

Jobs and Economics

Introduction

Purpose of Economic Analysis

The purpose of this chapter is to 1) Identify trends within the Greater Duwamish Manufacturing and Industrial Center (Duwamish M and I Center), 2) Quantify economic benefits of the region, and 3) Forecast jobs to analyze feasibility of achieving growth targets.

Context

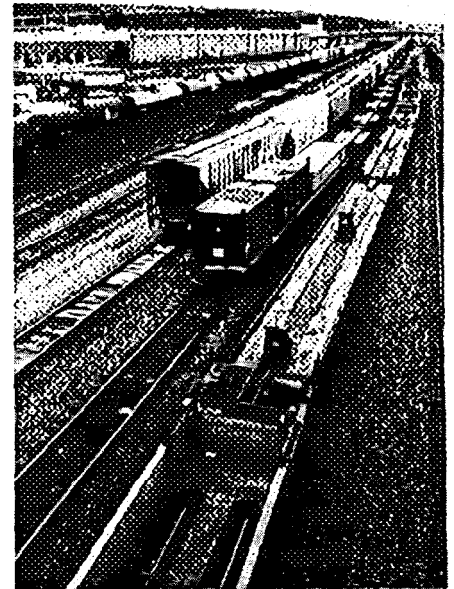
Use Patterns in the Duwamish Area

The Duwamish M and I Center consists of approximately 2,038 parcels on 4,138 acres, according to the King County tax assessor's 1997 database. Industrial uses clearly dominate the area:

- The largest land users of the area are transportation, communication and utilities with 1,524.8 acres or 36.8 percent of the total;
- Industrial uses are the second largest with 973.9 acres (23.5 percent of total);
- Third largest is warehousing, with 789.9 acres (19.1 percent of total);
- Bights-of-way (252 acres) are the fourth most extensive use;
- Parking is the eighth most extensive use;
- Existing non-industrial uses do not account for a very large amount of space in the Duwamish M and I Center. According to BST Associates, there are 57 acres in office use, 52 acres in retail/service, 23 acres in residential, 20 acres in public facilities, 6.1 acres in schools, 2.3 acres in lodging facilities, 1.6 in institutions, and 0.8 acres in mixed use. AU together, non-industrial uses only account for 163.5 acres or approximately four percent of the total acreage in the Duwamish M and I Center;
- While non-industrial uses only account for approximately four percent of the total, they have a much greater impact on the viability of the M and I Center. Non-industrial uses frequently occupy land adjacent to major arterials, can generate much more traffic on major arterials, and impact the overall mix of uses and industrial character of the Duwamish M and I Center by creating the impression that the M and I Center is a commercial area. While some non-industrial commercial establishments support industrial uses, many do not.

The term industrial, as defined by the GDPC, includes a variety of activities and uses, including:

- Processing or manufacturing of materials,
- Marine terminals,
- Industry-related transportation and facilities,
- Fabrication, assembly, treatment or wholesale distribution of manufactured products, or
- Production or storage of industrial related bulk materials.



Vacancy rates in the Puget Sound industrial market have remained at very low levels throughout the past decade, with a high of 5.6 percent in 1996, falling to 4.8 percent in 1997 and have continued to decline (BST Associates). There are currently only 278 parcels on 290.5 acres that are considered vacant properties in the Duwamish M and I Center.

There are many factors contributing to losses in employment within the Duwamish M and I Center, including the increased cost of land acquisition, higher lease rates, the inability to aggregate land, and transportation and access problems. Evaluation of the recent permit history in the area shows that the losses may be due to the introduction of non-industrial businesses. Between 1994 and 1997, there were 624 permits exercised in the M and I Center. Most of these permits entailed:

- Alterations to existing structures (256 occurrences or 41.0 percent of the total),
- Change of use (which occurred 104 times or 16.7 percent of the total), and
- Additions (which occurred 70 times or 11.2 percent of the total).

These three activities accounted for approximately two-thirds of total permit activity. Other permits ranged from access improvements to building a temporary structure.

Economic Importance of M and I Center

The industrial employment sector typically generates more economic impacts than other types of businesses. For example, according to the IMPLAN model for King County industrial uses, the multiplier for retail employment ranges from 1.34 to 1.61. This means that for every job in the retail sector, another 0.34 to 0.61 jobs are created. Wholesale trade, on the other hand, has an employment multiplier of 1.99. Water transportation, one of the major sources of employment in the M and I Center, has a multiplier of 2.80, which is much higher than that for retail. Motor freight & warehousing is also higher, with a job multiplier of 2.10. Manufacturing is also a big source of total job creation, with multipliers such as 1.80 for industrial machinery, 1.72 for boat building & repairing, and 2.24 for aircraft manufacturing. (Source: BST Associates. Please see Appendix C for more detailed economic information.) Overall, industrial uses generate more jobs than retail uses.

The total impact from wages paid in the retail sector is also substantially less than the wage impact of Duwamish industry sectors. In the retail sector, the wage multiplier for eating & drinking establishments is 1.64, meaning that for every \$1.00 paid in wages to restaurant workers, another \$0.64 in wages are generated across all employment sectors. In the transportation sector, water transportation generates a wage multiplier of 2.58 and motor freight transportation & warehousing generates a wage multiplier of 2.28. The wage multiplier for the wholesale industry is 1.66, slightly higher than that for eating & drinking establishments. In the manufacturing sector, aircraft manufacturing actually has a lower wage multiplier (i.e. 1.54) than the food service industry, but the average wage is much higher. Boat and ship building and repair has a wage multiplier of 1.64. Hotels & lodging are similar to food service, with a wage multiplier of 1.68; most other services fall in the range of 1.30 to 1.90.

The Duwamish Waterway is an important transportation corridor with regional and national significance. Serving as the lifeline to Southeast and Western Alaska, domestic and international traffic via the waterway amounts to approximately 7.2 million tons, valued at approximately \$7.5 billion.

In addition, most of the products bound for Alaska originate in the Seattle area, which increases the economic significance of the waterway to the City of Seattle and King County. The Duwamish is also an extremely important corridor of bulk raw materials for the region's construction industry (especially cement, limestone, gypsum and other building materials).

The Duwamish M and I Center also generates a significant portion of the City's taxes:

- Approximately \$19.5 million in property taxes, which represents four percent of overall property taxes collected in the City of Seattle;
- Approximately \$1.2 million in leasehold taxes by tenants of the Port of Seattle;
- Approximately \$46 million in sales/use and B & O taxes, representing 21 percent of such taxes collected in the City of Seattle; and
- The City of Seattle imposes a B & O tax on gross revenues (not on profit) -something not required in other nearby jurisdictions. Many businesses perceive this tax as a **disincentive** to locating in Seattle.

Area	# of Parcels	Total Assessed Land Value	Total Assessed Value of Improvements	Total Value of Real Property	Total Property Taxes Billed (Millions)
Duwamish M&I Center	1, 998	\$1,373,890	\$533, 715	\$1,907,605	\$19, 500
Seattle Citywide	174, 561	\$21,168,472	\$28,351,250	\$49,519,722	\$485, 630
Duwamish as % of Citywide	1. 14%	6. 49%	1. 88%	3. 85%	4. 02%

Source: King County Assessor, 1998.

Table 2-1: Estimated Property Taxes - 1998 (in \$1,000s)

The Duwamish Manufacturing and Industrial Center is an extremely important employment base and revenue generator for the City's budget with annual tax revenues of approximately \$67 million. The economic development strategy for the Duwamish M and I Center is designed to recognize, foster and protect this important employment and tax base.

An important part of developing this recognition is to prepare and disseminate an annual (or biannual) assessment of the M and I Center that updates:

- the number of and type of jobs in the area (including the average payroll by sector), and
- the dollar value of taxes generated by the Duwamish M and I Center for the City of Seattle.

family Wage Jobs

A key goal of the Seattle Comprehensive Plan is to "keep family-wage manufacturing jobs from leaving the city". However, not all industries contribute equally to the regional economy. Average annual wages are an important consideration in measuring the contribution that industry

makes, in terms of providing stable family wage jobs and generating significant local spending and tax revenues. In 1997, the annual average wage in King County was approximately \$37,299, which translates roughly into an hourly wage of nearly \$18 an hour for full time, year-round employment. As shown in Table 2-2, most industrial jobs meet or exceed the average wage:

- Manufacturing jobs averaged \$44,621 or 19.6% above the average;
- Transportation & public utilities jobs averaged \$40,801 or 9.4% above the average;
- Wholesale trade jobs averaged \$42,197 or 13.1% above the average; and
- Construction jobs met the average wage standard.

Industry	Average Wage	percent of Average
Construction	\$37,180	-0.3%
Manufacturing	\$44,621	19.6%
Transportation & Public Utilities	\$40,801	9.4%
Wholesale Trade	\$42,197	13.1%
Retail Trade	\$19,502	-47.7%
Finance, Insurance, & Real Estate	\$45,022	20.7%
Services	\$41,037	10.0%
Total	\$37,299	0.0%

Source: BST Associates using data from the Washington State Employment Security Department

Table 2-2: Average Annual Wage in King County, 1997

On the other hand, retail jobs generated slightly more than one-half of the average wage. Although services generated ten percent more than the average in total, hotel workers and personal service workers received an average of only \$18,693 and \$17,695 per year, respectively.

It is very important to recognize the contribution that industry makes in terms of providing a large number of well-paid “livable or family” wage blue-collar jobs.

Needs and Site Characteristics of Industrial Land Users

Manufacturing, industrial, and marine-related businesses like those in the Duwamish M and I Center generally require large tracts of lower-cost land with access to freight transportation, space for outdoor storage, loading and maneuvering corridors, heavy use of utility infrastructure, and separation from non-industrial uses. There is increasing demand for more large parcels-which are difficult to obtain in an urban setting-in the M and I Center than are available.

In addition, industrial land use in the entire M and I Center is under pressure from many forces, including conversion to higher-paying commer-

cial uses (which typically pay higher rents) and use of waterfront property for public access and recreation, among other pressures. These pressures are even greater north of Spokane Street.

Land Use Forecasts

Using employment-based forecasts for land use planning, the Duwamish M and I Center can expect to accommodate an employment growth of 7,389 over the next two decades. This is lower than the Seattle Comprehensive Plan anticipates for the area by over 3,000 jobs. To meet the City's anticipated growth in jobs will require more intensified uses of existing industrial land, employing such strategies as adding shifts to existing businesses, investing in production, improving technology, and more education for employees. It should also be noted that the employment forecasting models do not take into consideration the probable need for additional transportation or storage demands that increasing employment will require. One forecast projects a shortage of nearly 50 acres to accommodate the more modest growth assumption.

The Port of Seattle has recently commissioned a detailed assessment of waterfront property in the Seattle area, entitled *The Marine Industrial Land Study*. This study describes the existing uses of the waterfront industrial and uplands support areas, and projects future land uses to the year 2020 based on surveys and cargo traffic forecasts as well as employment forecasts. There are 1,696 acres in the two marine subareas comprising the Duwamish M and I Center, including 956.6 acres in the South Harbor and 739.4 acres in the Duwamish estuary. These areas are already very well utilized with only an estimated 133.7 acres currently vacant. The Port forecasts a need for 382 additional acres by the year 2020.

The City should follow-up to determine who owns these vacant lands; how much is usable; and how much is impacted by environmental contamination.

In addition, other public agencies have also expressed an interest in developing facilities in the Duwamish M and I Center, including expansions or new facilities by Sound Transit, Metro, Seattle City Light, and the Seattle School District, among others. The total acreage these agencies desire is unknown.

There is a projected shortfall of space of approximately 428 acres (702 acres demanded less the 274 acres vacant and available). Consequently, this plan places high priority on retaining existing firms and establishing a relocation strategy that keeps existing firms in the area as public agencies and other private firms seek to locate in the area or to expand at existing locations in the Duwamish.

Infrastructure Improvements and Public Safety

Due to its age and on-going deferred maintenance, the Duwamish M and I Center has an immediate need for infrastructure improvements. Several of the transportation corridors in the M and I Center are congested and operate over capacity during peak hours (See Chapter 4 and Appendix A). Many roads are also in poor physical condition. Traffic improvements are required to facilitate greater mobility on surface streets, and for truck, rail and marine intermodal traffic.

Improvements should be planned for both transportation and utility systems, as documented in Chapter 4: Transportation.

Improvements include at-grade separations, improved truck turning radii and other related freight mobility improvements. The FAST Corridor improvements will address some key areas of concern. The development of Intelligent Transportation System (ITS) improvements are also expected to improve traffic flows in the Duwamish M and I Center.

Drainage systems in selected areas of the Duwamish M and I Center are inadequate and unsafe. In addition, there is a need for additional police activity in selected areas of the Duwamish to stop criminal activities.

Regulatory Environment

City regulations and their enforcement must be supportive of the Comprehensive Plan policies and goals of preserving and expanding manufacturing, industrial, and marine uses. Issues related to regulations and their enforcement are considered very important by Duwamish M and I Center businesses.

The City currently sends conflicting signals to industrial firms. On the one hand, it spends considerable time implementing positively perceived outreach, financing and jobs initiative programs. On the other hand, the City has very cumbersome regulations and has allowed non-industrial uses (stadiums and hotels) into the industrial area. Industrial users need a more predictable and supportive environment to flourish.

Business owners who were interviewed expressed frustration at the complexity and time-consuming nature of applying for development permits. The process is perceived as onerous and is often administered by City employees who are either not helpful or seen more as impediments. There is a need in some departments for more accountability.

On the other hand, City policies that impede industrial development can lead to business relocations to other more favorably perceived areas. It should however, be recognized that City policies have minimal impact on retaining firms if market forces (i.e., changes in market location, competition from overseas, and like factors) dictate that they should relocate.

Additionally, in marine industrial areas, the regulatory environment is further complicated by the involvement of several State and Federal departments in regulatory processing, the listing of Puget Sound Chinook salmon as an endangered species (with major and expensive implications for industry), and the fact that several tribes have jurisdiction in the area.

Employment Characteristics

The Greater Duwamish M and I Center is recognized as a key employment center in Central Puget Sound because it provides a large number of family-wage industrial jobs and generates enormous tax revenues and economic benefits.

Overall Employment

There were approximately 60,700 employees located in the M and I Center in 1997. Most of the jobs were in the heavy and light industrial categories, dominated by manufacturing, transportation/communications/utilities

(TCU) and wholesale trade. Together, these three sectors accounted for 67 percent of total employment. The next largest sectors were services, retail trade and construction, representing approximately 30 percent of total jobs. In addition, there are approximately 1,989 employees of government and education agencies, an estimated 600 sole proprietors and 150 employees engaged in agricultural services and/or mining.

Industrial Employment

The Duwamish M and I Center is unique to the City of Seattle, both as an important employment base and as a tax base. As previously mentioned, there are approximately 60,700 employees in this area with wages substantially above the average in King County.

The Duwamish M and I Center was the place of work for an estimated 14,402 employees in 1997 in a wide variety of manufacturing sectors, dominated by:

- Transportation equipment,
- Food processing,
- Fabricated metal products,
- Non-electrical machinery,
- Apparel and Accessories,

SIC	Sector	1997	Percent
20	Food Products	1,404	9.7%
23	Apparel	1,219	8.5%
24	Wood Products	173	1.2%
26	Paper Products	226	1.6%
27	Printing, Publishing	583	4.0%
28	Chemical Products	157	1.1%
/ 29 /	Petroleum Products	21	0.1%
32	Stone, Clay, Glass Products	1,123	7.8%
33	Primary Metals	747	5.2%
34	Fabricated Metals	1,313	9.1%
35	Non-electrical Machinery	1,306	9.1%
36	Electrical Machinery	210	1.5%
37	Transportation	4,546	31.6%
	Other Manufacturing	1,374	9.5%
	Total	14,402	100.0%

Source: BST Associates using data from PSRC, Employment Security

Table 2-3: Manufacturing Employment in the Duwamish Manufacturing and Industrial Center in 1997

Source: King County Assessor, 1998.

- Stone, Clay, Glass & Concrete Products,
- Primary Metals, and
- Printing & Publishing, among other sub-sectors. (See Table 2-3)

Strategic Location

Many of the manufacturing firms located in the Duwamish M and I Center take advantage of the transportation advantages that the area offers, including:

- Proximity to Boeing Field, which facilitates access to aviation facilities and to Boeing for its suppliers,
- Proximity to water-access on the Duwamish, which provides access for fish/seafood products and a variety of other bulk inputs for the manufacturing process (limestone, gypsum, cement, and petroleum products), as well as the ability to repair and build vessels and barges,
- Proximity to downtown Seattle and the metropolitan area, which is an advantage for printers and publishers, among other sectors,
- Proximity to the large industrial base of the Duwamish, which assists foundries, machine shops, chemical providers, electrical and non-electrical machinery and equipment and other sectors, and
- Proximity to the large employment base of the Seattle area, which assists all firms in the area, especially labor-intensive manufacturing sub-sectors (e.g., such as apparel, sporting goods and other manufacturers).

Most of the manufacturing firms in the Duwamish M and I Center located there several years ago, and the metropolitan area has grown up around them. At the initial time of location, this was the primary industrial area in the Seattle area, preceding development in the Kent and Auburn valleys, the Eastside and other newer industrial centers located in Pierce and Snohomish County.

Retail and Service Employment

A crucial element of this plan is to determine how to retain existing firms as well as to attract new firms that are compatible with the area. With this overall goal, it is important to understand the dynamics of the existing area firms and how they interact in the area.

A key finding of this study is that many of the businesses in the retail and service sectors are important to the overall health of the industrial area. With respect to retail employment in the area, several themes were detected, including:

1. Many of the firms are located in the area to serve employees of the industrial firms in the area (especially the food stores, service stations, uniform stores, pharmacies, and eating & drinking establishments);
2. Many are also located in this area to serve the retail needs of the industrial area and the downtown area (especially building materials, motor vehicle and truck supply stores, service stations, salvage businesses, furniture/fixture and office supplies, among other businesses); and
3. The great majority of retail firms also had other secondary lines of business that were typically industrial in nature. This includes a business interest in construction, manufacturing and/or wholesale trade. This

dual nature of firms makes it difficult to exclude retail firms from the definition of industrial firms. Examples of this duality include:

- Building materials retailers that also provide wholesale sales, construction and possibly manufacturing services;
- Gasoline stations that also provide wholesale sales and truck scales or other transportation-related services;
- Several retailers also manufacture some of their products; and
- Only a few retailers appear to serve the retail needs of the greater Seattle metropolitan community or the other neighborhoods around the industrial area. Much of this retail activity is focused in the Design Center and in the northern reaches of the M and I Center (e.g., around SODO Center).

Several themes are also apparent regarding the service firms located in the Duwamish M and I Center:

1. Only a few of the firms are located in the area to serve employees of the industrial firms in the area (banks, labor organizations, etc.);
2. A few of these firms meet the service needs of the local communities (beauty salons, attorneys, etc.), and are located near residential populations in South Park and Georgetown;
3. Many firms are located in this area to serve the service/repair needs of the industrial area and the downtown area (especially cleaners, auto/truck repair and service, and a wide variety of other business services);
4. Many organizations serve community-wide social and health functions; and
5. Some of the service firms also had other secondary lines of business that were typically industrial in nature. This includes a business interest in construction, manufacturing and/or wholesale trade. This dual nature of firms makes it difficult to exclude service firms from the definition of industrial firms. Examples of this duality include:
 - Cleaners that also provide fire damage restoration or other construction-related activities and/or services;
 - Several firms involved in servicing audiovisual and computer accounts or that provide office plants and landscaping services also provide wholesale sales; and
 - Some service firms also manufacture other products.

Employment Forecasts: Shortfall from Comprehensive Plan Targets Indicate Need for Positive City Action

Using the City Light forecast growth rates by sector, it is anticipated that the Duwamish will grow from its current base of 60,700 jobs in 1997 to approximately 68,089 by the year 2020. This amounts to growth of 0.5 percent per year. The overall goal for new employment in the area was set at 10,860 new jobs in the City's Comprehensive Plan (1994). Given the present trends and policies, it is unlikely Seattle will achieve its target for the Duwamish area. Employment growth of 7,389 jobs is considered as the lower-end forecast for employment in the area. This low-end forecast represents employment that will occur naturally with market forces.

Industry	1997	2020	Increase/ Decrease	CAGR
Agricultural Services/Mining	150	209	59	1.4%
Construction	4,105	6,157	2,052	1.8%
Manufacturing	14,402	14,418	(254)	-0.1%
TCU	14,008	14,547	539	0.2%
Wholesale Trade	12,525	12,792	267	0.1%
Retail Trade	6,455	8,268	1,813	1.1%
Services	7,066	9,511	2,445	1.3%
Government/Education	1,989	2,457	468	0.9%
Proprietors	600	754	154	1.0%
Total	60,700	68,089	7,389	0.5%

Source: BST Associates using data from PSRC, Employment Security, and Dick Conway & Associates

Table 2-4: Forecast of Employment in the Duwamish Manufacturing & Industrial Center

The majority of the employment growth is anticipated to occur in services, construction and retail trade sectors. Manufacturing is expected to experience a slight decrease in employment. Other sectors are expected to exhibit relatively slow growth. It will take intervention from the City of Seattle and other agencies to achieve the higher growth target.

A recent analysis prepared for the King County Council, Commerce, Trade, and Economic Development Committee (Staff Report, Agenda Item Number 2, March 11, 1999) suggests that employment growth in the industrial sectors in King County District 5 (which includes the M and I Center and parts of Renton and Tukwila) could actually be higher. While it is difficult to compare this data (which was compiled from different sources) to this Plan's employment forecast, this King County Council analysis does create a basis for optimism.

Regional Industrial Context

The Puget Sound industrial market has been growing very rapidly in the past decade outside of the City of Seattle. Annual construction has averaged more than 7.0 million square feet during the past three years, up from 3.5 to 4.0 million square feet in 1985 and 1990. The vacancy rate in the region has remained at very low levels throughout the past decade, with a high of 5.6 percent in 1996, falling to 4.8 percent in 1997.

The Puget Sound industrial market consists of several distinct markets:

- The largest area is the Kent Valley, which has 82.3 million square feet in the cities of Kent, Tukwila, Renton, SeaTac and Auburn, representing 45.1 percent of the total Puget Sound market;
- The Seattle Close-In market, which includes the Duwamish M and I Center, is the next largest subarea, with 67.5 million square feet, repre-

senting 37.1 percent of the total Puget Sound market. Both warehouse/distribution firms and manufacturers evenly use the Seattle market;

- The **Eastside** market, which includes Bellevue through Bothell along the high-tech corridor, is the third largest subarea, with 19.6 million square feet or 10.7 percent of the total. The **Eastside** market has the largest assemblage of high-tech space (4.3 million square feet) and caters more to high-tech manufacturers and service providers; and
- Two smaller, but rapidly growing markets are located to the south (Tacoma/Fife) and to the north (Snohomish County). These markets currently have 7.1 and 5.9 million square feet respectively, and account for approximately 7.1 percent of the Puget Sound market.

The Seattle Close-In market has primarily been home to owner-users. As a result, there is little space available for lease and vacancy rates have been very low. As of the end of 1997, the vacancy rate in the area as a whole was less than 2.5 percent and less than three percent in the Duwamish M and I Center. The largest amount of vacant space was located between Spokane Street and the CBD. This includes the Post Office building, which is being planned for redevelopment in 1999.

Potential Solutions

This section identifies a number of solutions which are appropriate for the M and I Center. These solutions are further developed in the Goals, Policies and Actions sections of this chapter.

Job Retention

The Jobs and Economic Analysis (Appendix C) identifies the retention of existing businesses and employees as the top priority with attraction of new businesses as a second priority. To retain existing jobs, the City needs to a) improve transportation and infrastructure, and b) lighten the regulatory burden on businesses operating in the Duwamish M and I Center. **Implementation** of the land use, infrastructure, and transportation recommendations that follow in this plan will have the greatest positive economic impact on the M and I Center.

Consolidation of Public Facilities

A number of large public facilities in the M and I Center (such as the City of Seattle's Sunny Jim Facility and the Federal Center South) are either currently not fully utilized or may be surplus in the near future. Agencies such as the City of Seattle should be poised to offer and prepare such properties for private use, as appropriate. If new industrial public facilities that locate in the M and I Center displace existing private sector family wage jobs, the displaced jobs should be relocated by the public facility within the M and I Center.

Regulatory Improvements

Regulatory and permitting improvements would bolster and improve the ability for industrial businesses to continue to operate and locate in the M and I Center, including preparation of a programmatic EIS for parts or all of the M and I Center, "**pre-permitting**" of water-dependent and industrial uses, and increased regulatory clarity to implement industrial preservation policies.

Outreach & Advocacy Efforts

Continued outreach between the City and the industrial users in the Duwamish M and I Center is a critical component of the Economic Development Strategy. Outreach should include both formal meetings with the Georgetown and South Park communities, the SODO Business Center, the GDPC, as well as informal meetings with individuals and/or groups. The City has several current outreach efforts underway (e.g., related to Brownfields, financing and job initiative programs).

The Manufacturing and Industrial Council of Seattle (MIC) was created by the City of Seattle to give industry a voice to the City and has proven to be helpful in the outreach process. In addition, input from the neighborhood business groups (particularly the aforementioned groups) and business organizations is critical.

Business Incentives

The Office of Economic Development (OED) undertakes much of the City's industrial development efforts. OED's basic mission is to support a healthy, diversified economic base and to bring economic opportunities to all Seattle's citizens. To carry out this mission, OED focuses on the following goals:

- Strengthen the economic base and the business climate by supporting the creation and retention of livable-wage jobs in Seattle and the surrounding region; and by supporting a healthy and diversified regional economy;
- Support employment opportunities by ensuring Seattle's residents have the needed skills and opportunities to participate in the job market and obtain and retain livable-wage jobs; and
- Support community-based economic development by assisting in the development and ongoing support of community-based organizations dedicated to neighborhood revitalization.

The primary incentives that the City undertakes are advocacy (discussed above), financial resources and job initiative programs. (Major financing programs available for businesses are described in Appendix C: Duwamish M and I Center Economic Assessment.)

Land Acquisition and Land Banking

The City should consider a process of land acquisition and banking for uses that are compatible with the Duwamish M and I Center. The existing Brownfield initiative (coupled with other programs) could help in this regard. Public agencies can assist with land options through taking (eminent domain), purchase, or other means to create contiguous parcels of land needed for industrial development.

The role of public agencies in acquiring sites or vacant parcels is currently unclear. The Port of Seattle recently completed its *Marine Industrial Lands Study*, which concluded that the Port of Seattle may (under certain conditions) find it in its interest to:

- Assemble and create (or consolidate) sites,
- Provide sites for relocation,
- Purchase and hold sites,

- Redevelop sites, and/or
- Reclaim contaminated sites.

The extent of the Port's actions to develop or redevelop land is unclear at the present time. However, it is the only public agency that has directly addressed this issue.

The City is working jointly with the Port and County to assist the private sector in real estate development, particularly via the Brownfield Initiative, which provides the following benefits to property owners and developers:

- Map and characterize environmental problems throughout the area, which reduces the costs for private sector owners and developers;
- Model the shallow groundwater aquifer;
- Work with Washington State Department of Ecology to prepare an area-wide non-potability designation;
- Fund (along with the County) the Environmental Extension Service to provide assistance to property owners regarding both cleanups and improved operational procedures: and
- Develop a revolving loan fund to assist in cleanup assessments and actual cleanups.

Goals & Policies

Goal EC 1: Enhance the economic well being of the Duwamish M and I Center.

- Pol. EC 1.1 Acknowledge the significant contribution of the industries and businesses in the Duwamish M and I Center in terms of both jobs created, export revenues, and tax revenues generated.
- Pol. EC 1.2 Promote the benefits of the Duwamish to the general public and to business and political leaders.
- Pol. EC 1.3 Retain existing businesses and promote their viability and growth. 70 percent of jobs in the M and I Center are and will be created by small businesses.
- Pol.** EC 1.4 Attract new, family-wage businesses to the area.
- Pol.** EC 1.5 Work to achieve the growth target of at least 10,860 new family-wage jobs for the Duwamish M and I Center by the year 2014.
- Pol.** EC 1.6 Preserve land in the Duwamish M and I Center for industrial activities such as manufacturing, warehousing, marine uses, transportation, utilities, construction and other related industrial sectors.
- Pol. EC 1.7 Recognize the right of industrial businesses in the Duwamish to "industrialize" by allowing them to operate using accepted industrial practices without undue interference from adjacent uses as long as industrial zoning and development standards have been met. Accept as part of this right to industrialize that permitting for industrial uses should be simplified and timely.
- Pol.** EC 1.8 Coordinate efforts with BINMIC and other industrially-zoned areas.

Goal EC 2: Infrastructure in the Duwamish M and I Center shall be sufficient to ensure the *efficient* operation and smooth flow of goods to through and from the Duwamish M and I Center.

(Infrastructure includes publicly built and maintained roads, arterials, utilities, piers and other capital investments by the City, Port, County, State and Federal agencies, and sometimes private enterprises.)

Goal EC 3: Preserve land use in the Duwamish M and I Center for industrial uses (as defined in Action EC-1).

Pol. EC 3.1 Encourage site assembly for industrial use.

Pol. EC 3.2 Discourage non-industrial uses.

Pol. EC 3.3 Preserve sufficient capacity in shoreline areas for water-dependent uses.

Pol. EC 3.4 Maintain the existing M and I Center Boundaries.

Pol. EC 3.5 Separate industrial processes and functions from residences and the general public.

Pol. EC 3.6 Address the impacts of sports/exhibition facilities.

Several specific policies have been developed to address land use issues and can be found in the Land Use Chapter.

Goal EC 4: Simplify and streamline the City regulatory process.

Pol. EC 4.1 Bolster the efforts of staff of the Seattle Office of Economic Development to act as advocates for industry and business owners during the permit process.

Pol. EC 4.2 Support on-going efforts to adhere to timely permitting schedules.

Pol. EC 4.3 The City shall continue efforts to provide more consistency, coordination and predictability in permitting,

Pol. EC 4.4 Encourage construction maintenance and repair of piers and docks for workboats by establishing preferences for these uses in the Land Use Code and Shoreline Master Program.

Pol. EC 4.5 Within 200 feet of the Duwamish waterway shoreline, water-dependent and industrial uses shall be the highest priority in the Land Use Code and Shoreline Master Program than other uses, except within South Park.

Pol. EC 4.6 Notify users of the industrial area of all proposed legislative actions that affects the M and I Center.

Pol. EC 4.7 Prepare a Programmatic Environmental Impact Statement (EIS) for the M and I Center which identifies appropriate land use and transportation levels and thresholds for site specific environmental analyses and clean-up.

Goal EC 5: Create a process of land acquisition and banking to aggregate parcels for uses that are compatible with the Duwamish Manufacturing and Industrial Center.

*Goal EC 6: Coordinate **efforts** to assure a more comprehensive and effective outreach strategy.*

- Pol. EC 6.1 Staff engaged in financing outreach should be knowledgeable about other City programs, provide information regarding these programs and **put** interested owners in touch with other City staff to follow-up on their interest.
- Pol EC 6.2 Staff engaged in reviewing permit applications should be trained regarding economics, the role of manufacturing and industry, and the potential impacts of different kinds of projects on tax revenues as job retention.

*Goal EC 7: Help ensure the **effectiveness** of financial tools available **for** businesses.*

Recommended Actions/Strategies

The following section identifies specific actions and strategies which the City of Seattle must undertake in order to achieve the goals and policies delineated in the previous section. In most cases, the responsibility for these actions will fall to the following City departments: Department of Design, Construction, and Land Use, Strategic Planning Office, the Office of Economic Development, **SeaTran**, Seattle Public Utilities, and Seattle City Light.

*Code Amendments and Regulatory **Changes***

- Act. EC-1 Protect Industrial Uses **from** Encroachment. Strengthen the City's zoning policies to protect industrial uses from encroachment by non-industrial uses. As noted by the MIC, this is especially needed in and along the shoreline of the Duwamish River, along freight and goods access routes and where **freight** rail access currently exists.
- Rationale: The industrial zones currently allow large scale non-industrial uses to locate in them. A key strategy of the M and I Center Plan is to implement the County-Wide Planning Policies and the Seattle Comprehensive Plan by further restricting the size of non-industrial uses in industrial zones in order to preserve industrial lands for industrial uses.
- Act. EC-2 New Definition of **Industry**. Adopt the GDPC's definition of industry and incorporate it into City of Seattle land use code:
- "For the purpose of land use code interpretation, the intent of industrial zoning is to **affirm** the **compatibility** of **infrastructure** requirements, services, and regulatory support necessary to sustain industrial economic vitality and the ability to provide family wage jobs. This interpretation shall include the recognition that **industrial** activities are typically not compatible with office, **retail**, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for public services and negatively impacting industry's ability to sustain its employment base. The objective **of industrial** zoning shall be the segregation of business activity based on compatible uses and impacts as **well** as utility and **infrastructure** requirements.

Industrial activities shall be **defined** and characterized as the manufacture, assembly, storage, repair, distribution, research/development and transportation of materials, goods and **finished** products including commercial fishing and resource extraction and handling. The movement of trucks, trains, ships, airplanes and **nighttime** as well as daytime business operations are integral to this activity. Industrial air, noise and light emissions, while within legal limits, are often greater than those found in **office**, retail, or residential areas.”

Rationale: Industrial uses are permitted in the industrial zones but are not clearly defined as a category. The permitting of industrial uses is subject to code interpretation. The above definition will clarify what industrial uses are appropriate for the M and I Center.

Act. EC-3 **Simplify** and Streamline the Industrial Permitting Process. Simplify and streamline the industrial permitting process through the development of a Manufacturing Industrial Center Programmatic EIS and the adoption of a Planned Action Ordinance as part of the City of Seattle’s Comprehensive Plan.

Rationale: The Greater Duwamish Manufacturing and Industrial Center is an important regional center of industrial activity. A Manufacturing Industrial Center Planned Action with its explicit identification of the administrative “planned action” option will function in place of a formal environmental (SEPA) review on a project-specific basis. Planned Actions include future development proposals that fall within the thresholds analyzed in programmatic EIS, and which comply with the mitigation measures adopted by the Planned Action Ordinance. The City of Everett has implemented a successful Planned Action Ordinance.

Act. **EC-4** Expedite Permitting Process in Designated Areas. Revise land-use code to pre-qualify selected types of businesses (such as water-dependent users) to receive streamlined treatment in designated areas and set standards allowing water-dependent industrial businesses to locate on the Duwamish Waterway.

Rationale: In marine industrial areas, the regulatory environment is further complicated by the involvement of several State and Federal departments in regulatory processing, the potential listing of salmon as endangered species, and the fact that several tribes have jurisdiction in the area.

Act. EC-5 Provide Opportunities for Aggregation of Parcels. Provide opportunities for aggregation of parcels for industrial purposes, including street vacations, street ends, temporary uses, and reuse of vacant public property.

Rationale: Manufacturing, industrial, and marine-related businesses like those in the M and I Center generally require large tracts of lower-cost land with access to freight transportation, space for outdoor storage, loading and maneuvering corridors, heavy use of utility infrastructure, and separation

from non-industrial uses. There is increasing demand for more large parcels—which are difficult to obtain in an urban setting—in the M and I Center than are available.

Act. EC-6 Regulation Education. Clearly communicate appropriate regulations and their alternatives to industrial businesses.

Rationale: Business owners have indicated their concern about the complexity and time-consuming nature of applying for development permits. Clearly providing the appropriate information to industrial businesses helps prevent business relocations to other more favorably perceived areas.

Act. EC-7 Communication **Among City** Departments. Make a conscientious effort to review proposed regulatory review with other City Departments including the Department of Economic Development before changes are initiated. Include affected businesses, industries, and industry associations in review and formulation of regulations.

Rationale: It is important that City Departments review proposed regulatory changes for consistency and likely impact. It is of further importance that potentially impacted businesses and industries have meaningful and timely input into review decisions and the review process.

Act. EC-8 Maintain **Up-to-Date** Regulations. The City shall periodically examine its regulations for adequacy and current applicability to respond to changing conditions and technologies.

Rationale: Up-to-date regulations help to ensure the Duwamish M and I Center's competitive role among industrial areas as a place to locate industrial businesses.

Act. EC-9 Require Relocation Strategies to Keep Jobs in the Duwamish. Require new public facilities that dislocate jobs by moving into the Duwamish M and I Center to provide a relocation strategy to keep the existing jobs in the Duwamish M and I Center.

Rationale: It is important to retain family-wage jobs within the Duwamish M and I Center.

Act. EC-10 Piers. Amend City codes (Land Use Code, Building Code, Seattle Fire Code) to the extent that the Land Use Code includes policy statements about other types of structures (housing, industry, etc.) and/or the siting of those structures and uses. It should also include acknowledgment that piers provide a base of operations here thereby generating jobs and export revenue for Seattle, and that Seattle competes with other West coast ports for the business piers can create. Additionally, each of these City codes, to the extent applicable, should be so indexed that all individuals seeking to find out applicable design and construction standards and the potential availability of Seattle Fire Code Alternates can easily locate the pertinent regulations.

Rationale: Piers are valuable and costly infrastructure. City policy should reflect the desirability of maintaining this infrastructure because it essential to the type of economic

activity that Seattle's Comprehensive Plan and which contributes significantly to the viability and economic importance of the area.

Act. EC-11 Representation on the Construction Code Advisory Board. Add to the Construction Code Advisory Board a position to be reserved for a representative of maritime industry and for general industry and appoint appropriate individuals to the Board.

Rationale: Inclusion of maritime and general industrial representatives on the Construction Advisory Board will provide better public information about proposed legislative changes provide an ongoing opportunity for mutual education.

Several specific actions have been developed to address land use issues and can be found in the Land Use Chapter.

Ensuring the Effectiveness of Financial Tools Available for Businesses

Act. EC-12 **Create** Additional Financing Tools. Seek sources of funding for land acquisition, environmental cleanup and general business financing targeted specifically at the industrial uses in the Duwamish M and I Center. Such sources could include local sources, industrial revenue bonds, or federal sources.

Rationale: Businesses seeking to grow in the Duwamish M and I Center are faced with development costs higher than similar area in the County because of the small parcel sizes and the expense of environmental cleanup, as well as the fact that the area is mostly fill.

Act. EC-13 Seattle Jobs Initiative. Increase the funding for Seattle Jobs Initiative and work to involve more local employers in the curriculum development. Develop an employer list with the job descriptions for the graduates of the program, and work to create a seamless "school to work" path so students are aware as they go through the studies that there is a job waiting for them with specific employers if they successfully complete the training.

Rationale: Such a program helps assure local employers of properly skilled applicants for new or replacement job positions, and creates a direct entry into family-wage job environments for job seekers from the local population.

Maintaining Infrastructure in the Duwamish M and I Center

Act. EC-14 Maintenance Dredging. The City shall spearhead a process (in cooperation with the Washington Department of Fisheries and Wildlife, Army Corps of Engineers, tribes, and the Department of Ecology) to obtain timely dredging permits. The inability to obtain such permits in a timely manner may force marine businesses out of the Duwamish M and I Center.

Rationale: Continual and regular maintenance dredging keeps the waterway open for marine traffic. Delays caused by permitting and agency coordination can make navigation of the channel difficult, which in turn impacts marine industry.

- Act. EC-15 Regional **Infrastructure** Finance Plan. Develop a regional finance plan for infrastructure, with the Duwamish M and I Center as the catalyst. The Duwamish M and I Center should get its fair share of regional tax revenue generated to fund its needed infrastructure.

Rationale: Well-maintained infrastructure is critical for day-to-day operations within the M and I Center. Due to its age and on-going deferred maintenance, the Duwamish M and I Center has an immediate need for infrastructure improvements.

Marketing, Education, and Information

- Act. EC-16 Prepare Annual Financial Data for Distribution. On a bi-annual basis, the City should arrange for a short economic assessment of the M and I Center, which updates:

- The dollar value of taxes generated; and
- The number and type of jobs generated.

Rationale: Assembling data will track progress for the City in terms of job creation and retention. Data will also be a key piece of a public relations campaign for the Duwamish M and I Center.

- Act. EC-17 Prepare and Implement a Marketing Plan. Prepare and implement a marketing plan, which promotes the M and I Center as an attractive area for business and employment growth. Distribute materials among key public agencies, private sector industry and trade associations, and targeted sectors and businesses for specific growth and employment.

Rationale: The M and I Center is not specifically promoted at present to potential M and I businesses which could help make the area both more visible and competitive.

- Act. ED-18 Dock and Pier Improvement, Education, and Assistance. Prepare a Client Assistance Memo regarding pier maintenance and construction along the portion of the Duwamish River that is inside the boundaries of the Duwamish Manufacturing and Industrial Center for use by Duwamish waterfront property owners. The Memo should include specific examples of completed form applications for exemptions from Shoreline Master Program Substantial Development permit requirements. DCLU should provide information on exemption requests with special emphasis on Seattle Policies and Procedures 25.05.305.C. State and federal agencies should be encouraged to provide similar written assistance.

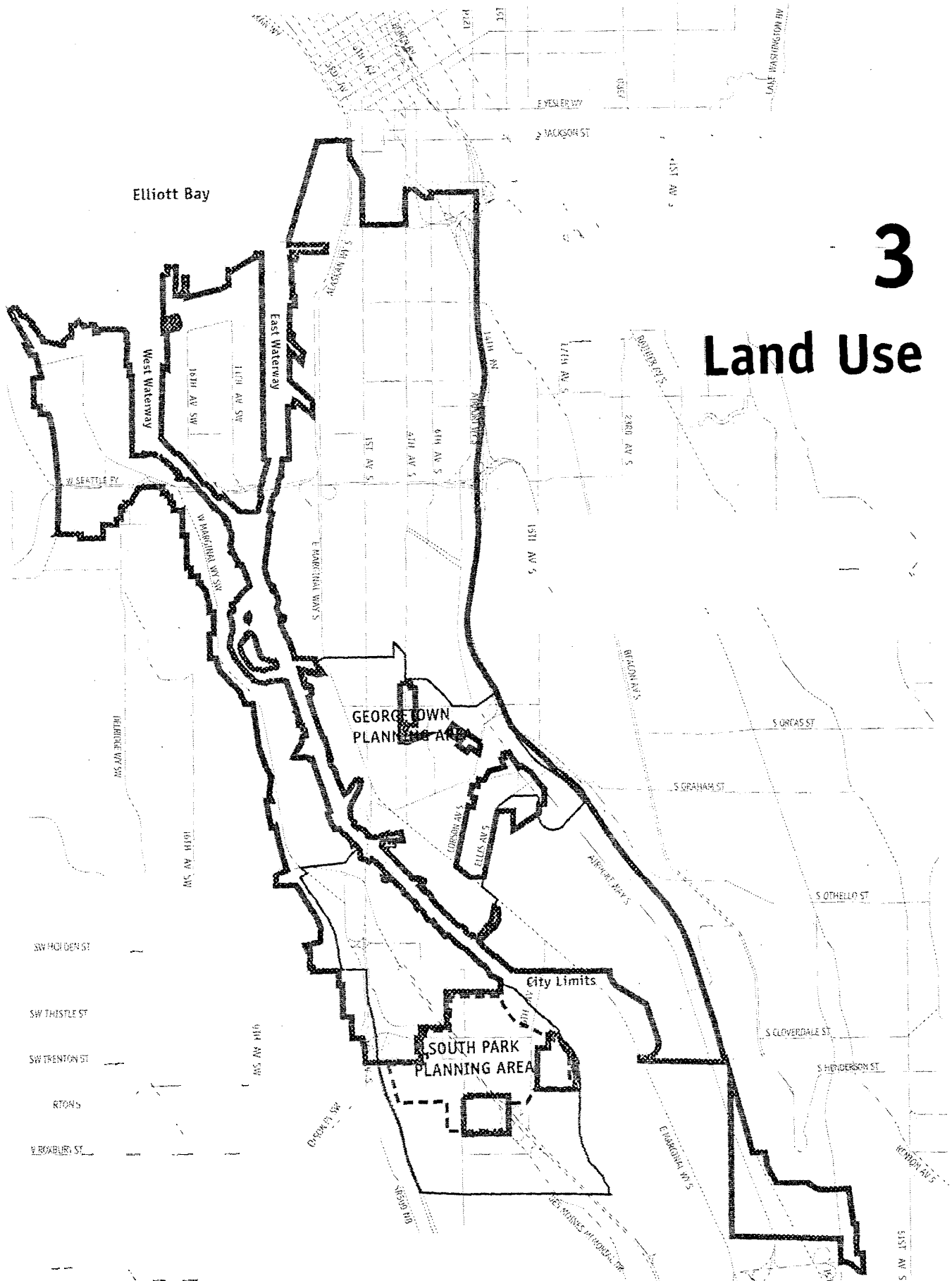
- Act. FD-19 Pier Adequacy and Facility Inventory. Inventory the adequacy of pier space and pier facilities for commercial work boats in the Duwamish Waterway and report to City Council on

findings to assure that Seattle is well positioned to maintain and strengthen its leadership role as a shipping and fishing port. DCLU should submit a draft of a New Director's Rule for review by the GDPC for an area-wide plan for pier restoration and maintenance that acknowledges City safety and environmental concerns and GDPC concerns with permitting requirements.

Act. ED-20 Review BINMIC Recommended Actions. Review the BINMIC recommended actions in the context of this plan and seek to incorporate. Based on GDPC review of BINMIC plan, seek to incorporate those BINMIC recommendations which would enhance this M and I Center Plan.

3

Land Use



Land Use

Introduction

As the largest center for industry in the State of Washington, the Greater Duwamish Manufacturing and Industrial Center is unparalleled in its importance to the City of Seattle, the region, and to the entire State of Washington. In addition to having the largest concentration of family wage jobs, the manufacture, processing, and transport of goods also generates enormous tax and export revenues.

Despite its historic economic strength, the viability of the M and I Center is threatened by pressure to convert the unique and irreplaceable industrial lands to nonindustrial uses. The pressure to convert has increased dramatically in the 1990's and is likely to continue and increase into the foreseeable future. Factors contributing to the increasing conversion pressure include the general strength of the local and national economies, the M and I Center's proximity to downtown, the low vacancy rates in nonindustrial zones, and the current land use code which permits a broad range of nonindustrial uses. In addition, the Duwamish M and I Center has been an industrial area for a very long time and suffers from changes in standards of use, leaving most sites with some level of environmental contamination (see Chapter 6, Environmental Remediation). Many industrial businesses have deferred maintenance, improvements and modernization. Many new industrial facilities have located in other newer industrial areas in the region.

Although both the adopted County-wide Planning policies and the City of Seattle Comprehensive Plan designate the area as a Manufacturing and Industrial Center and protect the M and I Center from encroachment of nonindustrial uses, current land use codes and their interpretation have not been revised to prohibit significant amounts of nonindustrial land uses to locate in the industrial area. Therefore increasing numbers of permitted nonindustrial uses have continued to locate within the M and I Center.

The M and I Center is also home to a number of public facilities (both industrial and nonindustrial), which, while generating family wage jobs, do not generate the tax and export revenues generated by private industry.

The list below identifies some of the nonindustrial and public facility projects which have been proposed or located in or on the periphery of the M and I Center. The cumulative impacts of these projects include the conversion of industrial uses to nonindustrial lands and the loss of family wage jobs, and tax and export revenues.

- Union Station Development,
- New Mariners Stadium (Safeco Field),
- First and Goal Stadium and Exhibition Hall,
- Proposed Airport Way Hotel,
- Proposed M & I Center Sound Transit Maintenance Base between Lander and Holgate, and light rail alignment,
- Potential Post Office conversion to Seattle School District Headquarters or other nonindustrial use,

- Ryerson and Central & Atlantic METRO bus base expansions, and
- Potential Redevelopment of the 7 acre WOSCA site at 1st Avenue and Royal Brougham Way.

A recent proposal (opposed by the GDPC) from the City of Seattle would extend the downtown boundary into what is currently the northern end of the M and I Center, thus reducing overall industrial acreage and introducing incompatible nonindustrial uses such as housing and more intensive retail into the industrial area. These proposals would also bring large numbers of the public into the industrial area, which is largely incompatible with the nature of the industrial land uses and creates public safety issues.

Existing Land Use Pattern

The Duwamish M and I Center comprises the City's largest concentration of manufacturing and industrial businesses. The following description provides more detail regarding the nature and character of the area.

- Marine and cargo terminals on Harbor Island and the Duwamish Waterway serve as the region's gateway to the Pacific Rim and act as a goods distribution conduit to the city, state, and the rest of the United States;
- The lands north of Spokane Street between East Marginal Way and Airport Way maintain many traditional industrial and manufacturing businesses but comprise the area where the pressure to convert is the greatest. There are several pockets of ancillary commercial retail, restaurant, office, and general service uses in this area. In addition, large developments such as sports stadiums and commercial development at the northern edge of the M & I Center have stimulated a rise in property values to commercial levels, making industrial development infeasible and raising questions about where downtown proper ends and the M and I Center begins;
- The lands south of Spokane Street primarily focus on warehousing, distribution, and manufacturing uses. The area has larger parcels than north of Spokane Street but also has several pockets of nonindustrial uses. These include the Georgetown Residential Neighborhood Anchor, the Seattle Design and Gift Centers, and commercial activity focused along 4th Avenue S between Dawson and Michigan Streets, and in South Park. The area also includes approximately 100 artist live/work spaces incorporating materials and processes generally incompatible with residential areas. The Seattle Design and Gift Centers include importers, exporters, distributors, fabricators, and retail uses;
- The South Park segment of the Greater Duwamish M and I Center has many manufacturing and industrial businesses. They can be found in three primary areas that surround the South Park Residential Urban Village. These industrial areas include old-time traditional manufacturers in the north South Park industrial area; warehousing, distribution and manufacturers west of 14th Avenue S; and industrial and manufacturing uses south of the residential urban village where it meets with unincorporated Ring County;
- Several public and quasi-public facilities are located throughout the M and I Center and on the boundaries, some of which are industrial and some of which are not. These include: the New Mariners' Stadium, soon

to be constructed First and Goal Inc. Stadium and Exhibition Center, Seattle City Light South Service Center, Seattle School District Administration, the Ring County Metro Transit Bus Maintenance Facility, Washington Department of Transportation Maintenance Facility, railroad service and maintenance yards, Department of Social and Health Services, and the Ring County South Transfer Station;

- The addition of nonindustrial uses and the resulting land use pattern generates nonindustrial traffic, which competes with industrial traffic for arterial capacity and access to freight terminals and facilities and makes access difficult for local businesses;
- Retail, service, and office uses along the main arterials, while appropriate to serve the users of the industrial area, are attracting a number of outside nonindustrial users to the area, creating additional traffic and the impression that the M and I Center is a general use retail and service area; and
- Port of Seattle consolidation and redevelopment of marine industrial facilities have strengthened the M and I Center's central role in freight movement in the region and to the Pacific Rim. Port of Seattle harbor operations provide 11,000 family-wage jobs.

Table 3-1 below identifies the amount of publicly-owned land within the M and I Center. This data may require updating and clarification.

	# Parcels	Acres
Industrial Use		
City	6	22.2
County	4	18.7
Federal	4	50.2
Port (incl. transportation)	32	785.5
School District	1	8.4
State	7	36.2
State - PFD	7	5.2
Sub-Total	61	
Non-Industrial Use		
City	64	94.1
County	11	17.9
Federal	1	0.3
Port	47	55.4*
State	25	19.8
State- PFD	2	13.4
Sub-Total	150	
Transportation/Utility Use		
City	13	43.5
County	16	603.0
Port	22	609.0
State	7	14.4
Sub-Total	58	

Table 3-1: Public Lands Within the M and I Center

Source: City of Seattle Strategic Planning Office, from King County Assessor's Data, 1997 and Port of Seattle

- includes 33.7 acres parks and public access, and 21.7 acres business park

Greater Duwamish Manufacturing and Industrial Center Industrial Zoning Map

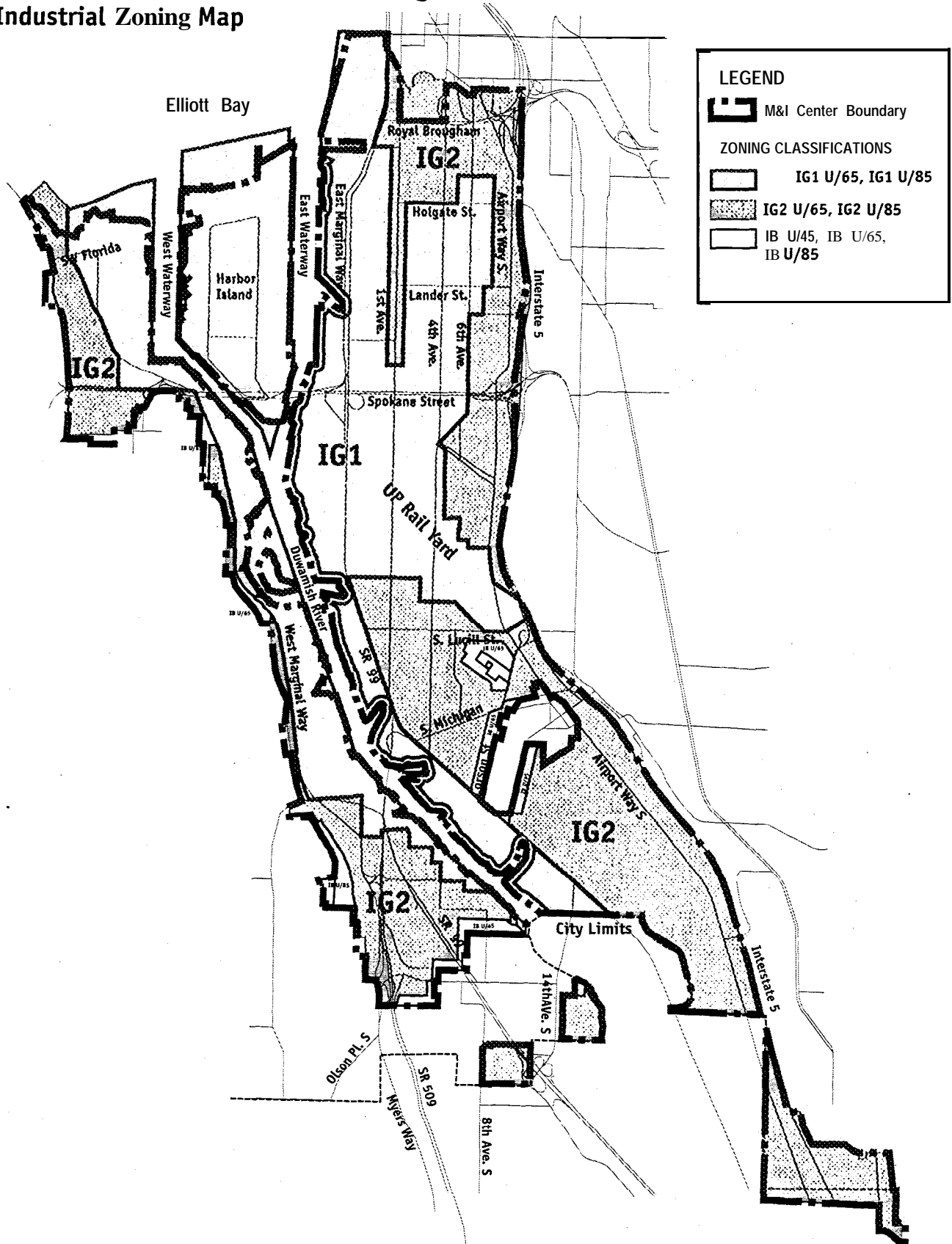


Figure 3-1 Greater Duwamish Manufacturing and Industrial Center Existing Zoning

Source: Arai/Jackson Architects and Planners, 1999

Parcel and Ownership Pattern

Analysis of the parcel sizes in the Duwamish M and I Center reveals that the area is largely comprised of relatively small parcels, particularly along the arterial corridors and north of Spokane Street. Larger parcels have been assembled to accommodate the rail lines and yards, port and shipping activities along the waterfront, and to accommodate some larger manufacturing and publicly-owned facilities. While historically many industrial sites were small, studies such as the Port of Seattle's Marine Industrial Land Study (1998) indicate that the majority of industrial users need sites of 15 acres or more to accommodate both industrial activities and staging and storage needs. Different industries have specific needs in terms of parcel location, characteristics and size, and as 70 percent of the existing jobs in the M and I Center are provided in small businesses, small sites are also needed. Due to the predominant pattern of smaller parcels held in individual ownerships, land assembly to accommodate larger industrial facilities remains a challenge in the Duwamish M and I Center.

Existing Zoning

There are three existing zones in the Greater Duwamish M and I Center: IG1, IG2, and IB, as illustrated in Figure 3-1 (City of Seattle Strategic Planning Office, 1998). These zones range in intensity of permitted uses, with IG1 being the most intensive industrial zone and IB providing greater latitude in land uses and development standards.

The intent of the IG1 zone (General Industrial 1) is to protect marine- and rail-related industrial areas from an inappropriate level of unrelated retail and commercial uses by limiting these uses to a density or size limit lower than that allowed for industrial uses. Typical uses include heavy manufacturing, some high impact uses as a conditional use, transportation and utility services, salvage and recycling uses, institutional uses in existing buildings, entertainment other than adult, and commercial uses subject to square foot limits (retail/entertainment 30,000 sf. and office 50,000 sf.). 51 percent of the lands in the Duwamish M and I Center are zoned IG1 (Source: City of Seattle DCLU publication *Seattle's Industrial Zones*).

The intent of the IG2 zone (General Industrial 2) is to allow a broader range of uses where the industrial function of an area is less established than in the IG1 zone, and where additional commercial activity could improve employment opportunities and the physical condition of the area, without conflicting with industrial activity. Typical uses are the same as in the IG1 zone. Uses subject to square foot limits are retail/entertainment 75,000 sf. and office 100,000 sf. 46 percent of the lands in the Duwamish M and I Center are zoned IG2 (Source: City of Seattle DCLU publication *Seattle's Industrial Zones*).

The intent of the IB zone (Industrial Buffer) is to provide an appropriate transition between industrial areas and adjacent residential zones or commercial zones having a residential orientation and/or pedestrian character. Three percent of the Duwamish M and I Center is zoned IB (Source: City of Seattle DCLU publication *Seattle's Industrial Zones*).

The IC (Industrial Commercial) zone is proposed as a rezone for the Georgetown Design Center area and in a modified form for the First Avenue South Area zone, as described later in this Chapter. The intent of the IC zone is to provide an appropriate transition between industrial areas and

adjacent residential zones, or commercial zones having a residential orientation and/or a pedestrian character. Typical uses include light and general manufacturing, commercial uses, transportation facilities, entertainment other than adult, institutions generally in existing buildings, utilities, and salvage and recycling uses. Retail sales and service, and entertainment except spectator sports facilities are limited to 75,000 square feet (Source: City of Seattle DCLU publication *Seattle's Industrial Lands*).

Proposed Rezones

First Ave. S. between Railroad Ave. and S. Massachusetts St:

The City, County and State decided to place a new Ballpark, Stadium and Exhibition Center within and abutting the north part of the Duwamish Manufacturing and Industrial Center. While the industrial community opposed the location of these facilities, the projects are now a reality. These facilities have serious, cumulative impacts on industrial activity and freight mobility, particularly on those properties north of Holgate Street. The full extent of these impacts may not be known for years. The blocks closest to the facilities and along First Avenue South between Railroad Avenue and S. Massachusetts St. are directly impacted by proposed development standards as well as the facilities themselves.

In May 1998, the Mayor put forth certain City objectives, including :

- 1) Maintain industrial land for industrial use and family wage jobs;
- 2) Restrict future development of industrial uses that would be incompatible with the ballpark;
- 3) Develop tighter restrictions on non-industrial uses elsewhere in the Duwamish; and
- 4) Draw a tight "buffer zone" that minimizes loss of industrial land.

The Mayor's stated objectives also include more housing in Pioneer Square and a safe pedestrian environment for ballpark, stadium, and exhibition center patrons, with convenient access to transit and other nearby services. The Mayor outlined a possible zoning option for discussion. That option also proposed moving the M and I Center boundary south down to Royal Brougham and correspondingly expanding the Downtown Urban Center south to Royal Brougham.

The GDPC appreciates the Mayor's support for maintaining the strength of this industrial area. While a transition zone may be appropriate for the other two neighborhoods, the GDPC does not want to encourage further incursions into the M and I Center and is opposed to a "stadium transition" into the Duwamish M and I Center. In support of all the goals and proposed policies described in this M and I Center Plan, the GDPC recommends instead that the current boundaries of the M and I Center remain the same and that Downtown Urban Center Boundaries do not change. The GDPC also believes that most of the Mayor's objectives and stakeholder concerns can be addressed by a limited rezone from IG2 to modified IC.

In addition to responding to the Mayor's proposal, the GDPC's own planning process looked at the area in proximity to the sport and exhibition facilities. The construction of large non-industrial facilities in an industrial area severely limits the ability of existing businesses to function in an

industrial manner. It impedes access, increases land values and lease rates, reduces available parking and increases pedestrian traffic. In recognition of these impacts, and in recognition of the GDPC's other goals and recommendations, including restrictions on non-industrial uses elsewhere in the IG1 and IG2 zones, the GDPC proposes a rezone from IG2 to a modified IC zone for the 4 block area along First Ave S. (from Railroad to Massachusetts) See Figure 3-3.

The new, modified IC zone for the First Ave S. area would eliminate more intensive industrial functions (e.g. heavy manufacturing and high impact uses) but maintain light industrial and other lower-density uses (e.g. fast food, gasoline stations & drive-up uses) which could serve the nearby businesses, SR 519, as well as stadia patrons. It would allow up to 3.0 Floor-to-Area Ratio (FAR) without size restrictions for office use (as in S. Lake Union I-C), but retail sales and services and entertainment would remain limited to 75,000 square feet, and the height limit would remain at 85 feet. Incentives, rather than restrictions, should be employed to address increased pedestrian traffic.

The GDPC recognizes that the WOSCA site is included within the M and I Center and is part of this recommended rezone to IC. Notwithstanding WSDOT's proposed use of the street level for ferry holding area, the GDPC recommends that the block remain industrially zoned: that no residences be allowed; and that redevelopment be governed by limits based on density, height, access, and transportation capacities. The proposed rezone from IG2 to IC best accomplishes these goals.

Local experience has repeatedly shown that new residents in or adjacent to industrial zones complain and demand that industries curtail their hours, spend funds on changing their operations and making expenditures on items that do not help them achieve their purposes, and curtail their lawful and essential activities, thereby shifting new burdens onto those industries.

Georgetown Design Center

Revise industrial zoning for the area around the Seattle Design/Gift Center to reflect the existing mix of businesses, while encouraging growth of light industrial and similar, high wage commercial uses within restricted areas.

Given the intent of other land use recommendations to tighten restrictions on non-industrial uses in IG1 and IG2 zones, the proposed rezone around the Seattle Design and Gift Center in Georgetown allows the flexibility for a continued mix of commercial and industrial uses. The proposal to change the zoning would facilitate the growth and expansion of desired industrial purposes such as light industries, warehousing, wholesale trades, and distribution in this portion of the Greater Duwamish Manufacturing and Industrial Center.

In addition, it would allow for continued conforming standards for the 4th Avenue S commercial area that includes fast-food restaurants, lounges, and other general commercial uses. The change to IC from IG2 would also advance future considerations for conditional use hotel, motel, and other transitory lodging, including one potentially developed by the Seattle Market Center, the development arm of the Design and Gift Centers. This type of use is considered desirable in the Georgetown area, given the intent of the local neighborhood plan to promote the expansion and continued

success of the wholesale home furnishing, design and gift trades. Also, there already exist two older motels in Georgetown, which are insufficient to meet this objective.

In large part, the proposal recognizes the need and market for compatible non-industrial uses in niche areas of the Greater Duwamish Manufacturing & Industrial Center. It seeks to accommodate uses considered incompatible in other parts of the Center, but in line with the existing condition and likely development pattern of the Georgetown subarea.

Lastly, the proposed rezone broadly meets the locational criteria established in the City's existing Land Use Code, 23.34.096, for Industrial Commercial (IC) rezones. As stated in the code, the IC zone intends to "promote development of businesses which incorporate a mix of industrial and commercial activities, including light manufacturing and research and development, while accommodating a wide range of other employment activities." A more detailed rezone analysis would, of course, still need to be conducted prior to final approval of this proposal by the Seattle City Council.

Job Forecasts and Land Capacity

Employment targets for the M and I Center identified in the Seattle Comprehensive Plan are for 10,860 new family wage jobs. According to an analysis prepared by the City of Seattle Strategic Planning Office in 1998, only approximately 274 acres of land are vacant and available for redevelopment in the M and I Center. Most of the available parcels are in small, discontinuous parcels, which are usually not the type of parcel that would be sought by industrial users. Given the total M and I Center acreage of 4,138, the total amount of vacant land is extremely low. Employment forecasts prepared for use in this plan identify future new employment at 7,389. Assuming average industrial employment densities, an additional 320.5 acres of land would be required, were these all industrial jobs provided in newly added industrial facilities.

Given the low amount of developable land, such strategies as absorption of new employment within existing businesses, intensification of production methods, intensification of uses, and addition of multiple shifts may need to be explored as alternatives to increased acreage.

Predominant Land Uses

Approximately 81 percent of the land area in the Duwamish M and I Center is in industrial use, with the remaining 19 percent in commercial, institutional, residential, and undeveloped lands. Lack of definitive land use data makes precise analysis difficult and indicates the need for the generation of reliable data and analysis.

Approximately 95 percent of the floor area in the M and I Center is in industrial use, with four percent in commercial use, and one percent in nonindustrial use (King County Assessor's Data, 1997).

Importance of Family Wage Jobs in the Manufacturing Context

The focus of employment growth in the M and I Center is on family-wage jobs, which are assumed to be a wage that would support a family of four. Family-wage jobs typically include, on average, a 40 hour work week and

benefit packages comprised of health insurance, pension plans, sick leave, and other benefits, compared to many service sector jobs, which do not include benefits and in which employees work a 32 hour week. Industrial family wage jobs provide additional benefit to the region because they create opportunities for higher paying employment to people with different levels of formal education and to people who may speak English as a second language.

In King County in 1997, the average annual wage was \$37,299, which translates roughly into an hourly wage of \$18 an hour for full time, year round employment. As identified in Chapter 2, most industrial job wages exceed the average job wages by between 9 and 19 percent. Retail jobs, on the other hand, averaged slightly more than one-half of the average wage.

Investment in industrial jobs benefits the economy in ways that service jobs do not, by generating higher employment throughout the region through the sale and shipment of both raw goods and finished products which supply and service the industrial area. Small manufacturers in particular depend upon the local production of goods and services, thus diversifying and augmenting the local economy.

In the Duwamish M and I Center, although there are large employers such as the Port of Seattle and the Boeing Company, greater than 70 percent of all jobs are retained in small businesses that provide family wage jobs.

Economic Significance of the M and I Center

Of the 60,700 jobs in the M and I Center as of 1997, 67 percent are in the light and heavy industrial categories. Retail and service jobs make up 22 percent, with the remainder split among other categories (See Chapter 2, Economics, for a more detailed discussion of jobs and economics).

Vacancy rates in the Puget Sound industrial market have remained at very low levels throughout the past decade, with a high of 5.6 percent in 1996, falling to 4.8 percent in 1997 (BST Associates).

Rental rates for industrial properties have increased at a lower rate than for other land uses, with an annual increase of 0.9 percent to 3.7 percent. Overall, the increase in construction has kept pace with absorption, leaving little wedge between supply and demand. Renters of industrial space are paying little more than they did seven years ago (BST Associates).

Land prices, however, have increased, particularly in the northern part of the M and I Center. While land values vary within the M and I Center, parcels proximate to downtown (\$30-\$40/square foot in areas proximate to the two new stadiums) have much higher land values than do parcels in the center of the M and I Center (historically \$6-\$10/square foot). In general, the average price of land in the Duwamish M and I Center is twice the market rate in the Kent Valley, Tacoma/Fife, and Snohomish County industrial areas, but industrial rents will not support higher land values (BST Associates).

The recently completed Port of Seattle Marine Industrial Land Study revealed a land price of \$20/square foot for waterfront land in Seattle compared with an average of \$6/square foot in other Puget Sound waterfront communities. The rise in land costs in the M and I Center makes it difficult for industrial businesses, particularly small businesses, to remain viable. In some cases

where both public and private expansion has occurred, acquisitions have been made at above market prices to induce a willing seller. These trends have different impacts on businesses who own their property than on renters.

Marine Industrial Lands

A recent analysis completed by the Port of Seattle Marine Industrial Land Study (November 1998) identified the level and nature of demand for marine industrial lands in the City of Seattle and the potential for identifying policy objectives and actions regarding the marine industrial land base.

The report concluded that there will be strong long-term growth in the freight transportation, intermodal, and construction/resource sectors as well as various water dependent uses such as passenger service. The processing/cold storage, service and supply (particularly fueling), and harbor services sectors will experience steady long term growth, and there will be limited growth in shipyard repair, and modest long term growth in equipment and repair.

In terms of the economic contribution of each sector, freight transportation represents the largest contribution to the local and regional economy in numbers of jobs. When combined with the intermodal sector, these two sectors represent over one-half of the total jobs in marine industrial sectors. Therefore the analysis concluded that the Port of Seattle target the following marine industrial sectors as priorities for their policies and actions: 1) Freight transportation, 2) Intermodal services, 3) Services and supply, 4) Harbor services, and 5) Passenger transportation. (See Appendix B, Jobs and Economic Analysis for more detail regarding job sectors.)

Existing marine industrial lands (City-wide) were categorized in the following manner: committed (66%) underutilized (parcels where the building value was 1% or less than the land value) (11%), purchased for expansion (5%), vacant (5%), and nonindustrial (13%). For the Duwamish, the study identified underutilized lands on Harbor Island and around Terminal 5, and on both sides of the Duwamish Waterway.

The analysis reaches the following conclusions regarding land supply and demand:

“Projected demand of 240 additional acres by the year 2010 exceeds the amount of land already purchased for expansion, but is less than the sum of vacant and purchased land. **If owners of vacant** property make those lands available, the land supply in aggregate is adequate to meet the demand.

The total demand of 500 acres by the year 2020 exceeds the amount of vacant and purchased land, but is less **than** the sums of those categories of supply plus underutilized lands. **If vacant** lands were available for development, and underutilized lands were available for redevelopment, and **if current** uses on those underutilized sites could be accommodated, the land supply is adequate to meet long term needs.

While the land supply may be adequate in aggregate, there may be shortages of land in particular sizes in particular locations.”

Waterfront lands along the Duwamish Waterway can accommodate long terms demand only if some underutilized sites are redeveloped and encroachment by nonindustrial uses is limited (Port of Seattle *Marine Industrial Land Study*).

According to the Study, while the land rents for Seattle marine industrial lands are higher than in other cities in the region, the disparity in building rents is not as great. As a result, the competitive disadvantage in land rents is partially offset by more favorable rents. This helps to explain why businesses choose to remain in Seattle despite higher land costs.

The Port of Seattle Marine Industrial Land Study assumed that the Seattle area would maintain its competitive position within the region and beyond as a location for marine industrial businesses. There is a strong marine business infrastructure in Seattle providing facilities, goods, and support services. This will continue to exist as long as businesses providing goods and services can find suitable sites and facilities.

Compared to other communities in the region, certain costs for companies are higher in Seattle, such as taxes, housing, some utilities, wages, and some environmental regulations. The difference in cost is likely to become larger in the future (Port of Seattle Marine Industrial Land Study).

Goals & Policies

The following sections provide goals and policies which form the basis for land use recommendations which are intended to implement the following key concepts:

- To discourage nonindustrial development in the industrial zones by restricting currently allowed nonindustrial uses,
- To differentiate more between the IG1 and IG2 zones,
- To keep residences and gathering places for the general public separate from the industrial areas and processes,
- To affirm the existing boundaries of the M and I Center, and
- To address impacts of sports/exhibition facilities.

Goal LU 1: Affirm and strengthen existing adopted policies that create the Greater Duwamish M and I Center

Pol. LU 1.1 Affirm the Seattle Comprehensive Plan and King County Countywide Planning Policies designation of the Greater Duwamish as a Manufacturing and Industrial Center.

Pol. LU 1.2 Affirm the Seattle Comprehensive Plan's employment growth targets of 10,860 additional family-wage jobs for the Duwamish Manufacturing and Industrial Center. (While the 10,860 jobs figure remains the target, the M and I Center Plan's economic analysis forecasts a growth trend of 7,386 new jobs, absent of any intervention such as by economic development programs.)

Goal LU 2: Preserve and protect lands in the M and I Center for the growth and expansion of family-wage industrial jobs for workers with diverse levels of education and experience.

Pol. LU 2.1 Protect the limited and nonrenewable regional resource of the industrial and marine lands in the M and I Center from encroachment of nonindustrial uses by amending and limiting allowable uses permitted under the Seattle Municipal Code and Shoreline Master Program Urban Industrial Environment.

- Pol. **LU 2.2** Protect industrial lands from encroachment of nonindustrial uses by increasing the distinctions between IG1 and IG2 zones. IG1 would allow primarily industrial uses and more strictly limit nonindustrial uses, and IG2 would allow a greater range of nonindustrial support uses. Reduce allowable size of commercial and retail uses in both the IG1 and IG2 to implement the County-Wide Planning Policies and the Seattle Comprehensive Plan.
- Pol. LU 2.3** Revise industrial zoning for the area around the Seattle Design/Gift Center to reflect the existing mix of businesses, while encouraging growth of light industrial and similar compatible uses which generate high wages within restricted areas.
- Pol. LU 2.4 Retain the existing boundaries of the M and I Center.
- Pol. LU 2.5 Revise industrial zoning for the First Avenue South Area (between Railroad and South Massachusetts) from IG2 to Modified IC to address the impacts of the sports/exhibition facilities, and to permit development of uses to be restricted elsewhere in IG1 or IG2 zones.
- Pol. LU 2.6 Ensure the separation of the general public from the M and I Center's industrial activities by limiting the potential for conflicts with pedestrian-oriented areas, incompatible uses, and businesses that attract the general public to the M and I center.

Goal LU 3: Preserve a working industrial waterfront that retains and expands the value of the Duwamish Waterway as a vital resource that provide! an important local family-wage job base and economic growth for the City, County, region, and State.

- Pol. **LU 3.1** Preserve the Duwamish Waterway marine industrial area and the waterway's ability to function as the City's gateway to the Pacific and an important warehousing and distribution center for the industrial businesses throughout the City and the County.
- Pol. LU 3.2** Prevent further conversion of industrial land to nonindustrial uses, and prevent the encroachment of nonindustrial and incompatible uses within the marine industrial area.
- Pol. **LU 3.3** Protect and improve **landside** access for freight (particularly east-west access).
- Pol. **LU 3.4** Preserve and increase family-wage jobs available to a wide range of job seekers, including disadvantaged individuals, through the preservation of Seattle's water-dependent industries.
- Pol. **LU 3.5** Preserve and increase the export revenues created by Seattle's water-dependent industries.
- Pol. LU 3.6 Expedite permitting of water-dependent industrial uses.
- Pol. **LU 3.7** Provide financial incentives for retention and creation of industrial uses.

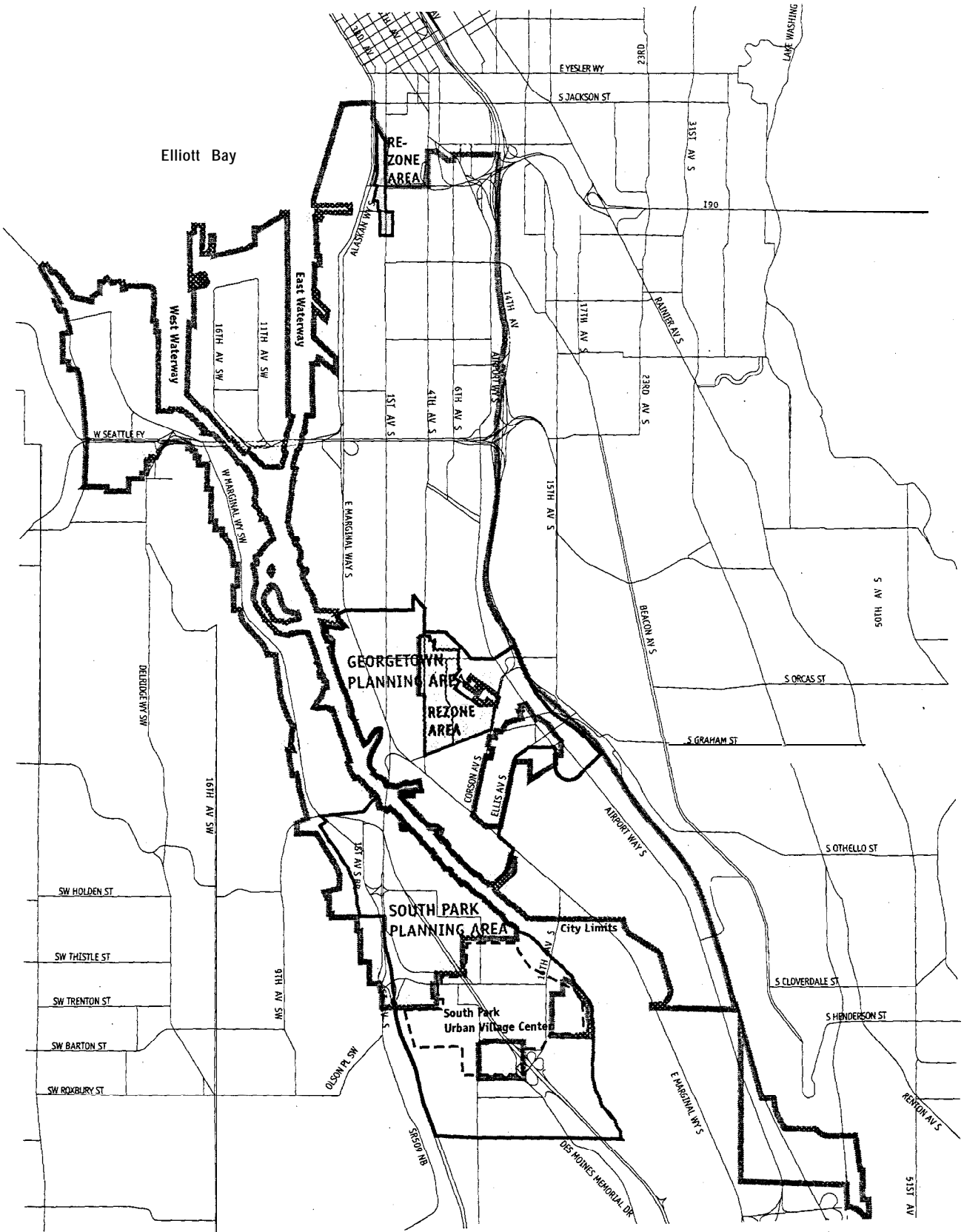


figure 3-2: Greater Duwamish Manufacturing and Industrial Center Rezone Areas

Source: Arai/Jackson Architects and Planners, 1999.

Pol. LU 3.8 Prohibit uses that are incompatible with the function of the Duwamish's Urban Industrial Environment, such as restaurants, taverns, and brewpubs.

Pol. LU 3.9 Allow uses such as marine retail activities that would be compatible with the function of the Duwamish's Urban Industrial Environment.

Goal LU 4: Retain the potential to expand the Greater Duwamish Manufacturing and Industrial Center as fostered by future growth of the local manufacturing and industrial employment base.

Pol. LU 4.1 Seek opportunities for future assemblage of parcels which can be targeted for manufacturing and industrial development. Explore options and agreements with King County and the City of Tukwila to ensure properties south of the South Park Industrial area remain industrially zoned.

Goal LU 5: Protect the M and I Center from further appropriation of the limited industrial land base for expansion of nonindustrial public facility uses and public land holdings.

Pol. LU 5.1 Adopt criteria that will be used to evaluate whether proposed public facilities are truly industrial in nature and/or contribute to the industrial environment of the Duwamish M and I Center.

Pol. LU 5.2 Restrict and limit the establishment and expansion of nonindustrial public facilities in the Greater Duwamish M and I Center.

Pol. LU 5.3 Ensure development and adoption of a disposition policy for public facilities that are being vacated or are no longer needed to return those lands/facilities to industrial uses.

Pol. LU 5.4 Work with other jurisdictions to (1) consolidate public facilities so that each facility meets the definition of industrial uses and is fully utilized, and (2) establish a cooperative agreement of joint government use of public facilities, where feasible.

Pol. LU 5.5 Establish a working arrangement with King County to adopt an Industrial Lands Acquisition Policy that will ensure that all publicly-owned lands within the Duwamish M and I Center are used only for industrial public facilities, and that all proposed uses are required to meet the criteria for public facilities, as recommended in the action items section of this element.

Pol. LU 5.6 Encourage other governments to avoid locating nonindustrial uses in the Greater Duwamish M and I Center.

Pol. LU 5.7 Work with King County and other government agencies to adopt policies for public facilities similar to those recommended in this section.

Goal LU 6: Preserve the Duwamish Manufacturing and Industrial Center that promotes growth and expansion of manufacturing and industrial jobs and businesses, and places limits on the presence of incompatible commercial, residential, and other nonindustrial uses.

- Pol. LU 6.1 Foster growth and expansion of manufacturing and industrial jobs and businesses through the adoption of appropriate City Regulations.
- Pol. LU 6.2 Adopt a new definition of industry that meets the intent and function of the Duwamish M and I Center. (See proposed definition below in Actions/Strategies.)
- Pol. LU 6.3 Adopt new definitions and criteria for Research & Development uses that will allow their limited and compatible presence within the Duwamish M and I Center.
- Pol. LU 6.4 Adopt land use code changes (including its zoning map and definitions) that will effectively restrict incompatible nonindustrial uses and preserve the industrial land base for manufacturing and industrial uses.
- Pol. LU 6.5 Establish stronger restrictions on incompatible uses, and increase the distinction between the IG1 and IG2 zones.
- Pol. **LU** 6.6 Amend the Industrial Sections of the Land Use Code to make it more user-friendly by including Indices, updating and clarifying definitions, ensuring consistency with City fire code, and other techniques.

Recommended Actions/Strategies

The following section identifies specific actions and strategies which the City of Seattle and other entities must undertake in order to achieve the goals and policies delineated in the previous section. In most cases, the responsibility for these actions will fall to the following City departments: Department of Design, Construction, and Land Use, Strategic Planning Office, the Office of Economic Development, SeaTran, Seattle Public Utilities, and Seattle City Light. Proposed actions and implementation roles are identified fully in the Draft Adoption and Approval Matrix.

- Act. LU-1 Retain existing Industrial Use of Unincorporated Lands. The industrial lands located in unincorporated King County south of Seattle's South Park industrial area need to be maintained in either the City of Seattle or the City of Tukwila. While some prefer to add those valuable industrial lands to the City of Seattle's land base, the highest priority is to **retain** existing industrial uses. Coordinate and work with King County and the City of Tukwila.

Rationale: The limited acreage of valuable industrial land could be augmented by annexing County lands into the City of Seattle thus positively impacting the tax and employment bases of the M and I Center.
- Act. LU-2 **Infrastructure** Improvements. Require Seattle Public Utilities to coordinate with King County and its industrial users to plan and build public infrastructure and utility improvements to

connect South Park and King County businesses to new sewer and storm drainage systems.

Rationale: Incentives may be required to attract industrially zoned land into the City of Seattle. Coordination of the provision of utilities and infrastructure would remove existing barriers to development of these lands.

Act. LU-3 Sewer and stormwater drainage. Require Seattle Public Utilities to follow up on studies to build sewer and stormwater drainage facilities within the South Park industrial area.

Rationale: Drainage improvements will correct existing deficiencies which currently make it difficult to operate and attract new businesses. Better drainage would improve safety, structural integrity, and visual character of the roadway systems in M and I Center and would significantly increase the durability and life expectancy of paved structures through this district, therefore decreasing life cycle costs by reducing pavement rehabilitation needs.

Expansion of the M and I Center

Act. LU-4 Implement South Park sewer and drainage **facilities**. Require Seattle Public Utilities to coordinate with King County and its industrial users to plan and build public infrastructure and utility improvements to connect South Park and King County businesses to new sewer and storm drainage systems. Conduct a study to determine near- and long-term capital facilities, determine what percent of need is for nonindustrial uses, seek funding for a major demonstration implementation project, and begin capital facility planning to build the proposed projects that will result in from the infrastructure study. This proposed utility project must include a strong and consistent community outreach campaign to South Park and King County manufacturing and industrial businesses.

Rationale: Providing adequate sewer, drainage, and other infrastructure is basic to promoting industry.

Act. LU-5 Business Research. Collect information, conduct interviews, and analyze the data to identify the specific reasons why industrial business owners in the South Park area and those in the northern part of Tukwila do not want to locate within the City of Seattle. Determine specific impediments to conducting business in the City of Seattle.

Rationale: Identifying the impediments to conducting business could lead to recommendations to **address** disincentives to locating industry within the City of Seattle.

Act. LU-6 Criteria for Location of Public Facilities. Adopt a definition for limiting public facilities in the Duwamish M and I Center in the Comprehensive Plan and Land Use Code. In order to be a permitted public facility use, the following criteria must be met:

- A. Be industrial uses that meet the recommended M and I Center Plan definition of industry (as defined in Code Amendments and Regulatory Changes recommended actions section of this Plan) and/or contribute to the industrial environment of the Duwamish M and I Center,
- B. Demonstrate the legitimate need for the proposed size and have realistic plans for full use of the proposed facility at the time that occupancy is permitted,
- C. Not be used to provide services or meeting spaces for the general public as a significant part of the intended use,
- D. Notify all property owners within the M and I Center about the proposed changes.

Rationale: Currently no policies exist to prohibit the location of nonindustrial public facilities in the industrial area. Both the location of large new public facilities and the renovation of existing facilities for nonindustrial use have occurred in the M and I Center, resulting in a net loss of industrial lands and the Center. The policies will ensure that only industrial public facilities will locate in the M and I Center in the future and that public facilities are fully utilized.

Act. LU-7 Definition of Industry. Adopt the following definition of industry as the working and referenced definition of industry and industrial uses in the City's Land Use Code and Comprehensive Plan to clarify appropriate industrial uses. Amend the Code to include the following definition:

"For the **purpose of land** use code interpretation, **the** intent of industrial zoning is to **affirm the compatibility of infrastructure requirements**, services, and regulatory support necessary to sustain industrial economic vitality and **the** ability to provide **family** wage jobs. **This** interpretation **shall include** the recognition that industrial activities are **typically** not compatible with office, **retail**, or residential uses and that incompatible uses generate pressure on property values, lease rates, and transportation corridors, increasing demand for **public** services and **negatively** impacting industry's **ability** to sustain its employment base. The objective of industrial zoning **shall** be the segregation of business activity based upon compatible uses and impacts as **well as utility** and infrastructure requirements.

Industrial activities **shall be defined** and characterized as **the** manufacture, assembly, storage, repair, distribution, **research/development** and transportation of materials, goods, and **finished** products **including** commercial **fishing** and resource extraction and handling. The movement of trucks, trains, ships, **airplanes**, and nighttime as **well as** daytime business operations are **integral** to this activity. Industrial air, noise, and light emission, while within legal **limits**, are **often** greater than **those** found in office, retail, or residential areas."

Rationale: Industrial uses are permitted in the industrial zones but are not clearly defined as a category. The permitting of industrial uses is subject to code interpretation. The above definition will **clarify** what industrial uses are appropriate for the M and I Center.

Act. LU-8 **Definition** of Users of the Industrial Area. Amend the Land Use Code to state that patrons of sporting events and individuals transiting the area are not “users of the industrial area”. (October 31, 1997 Airport Way Hotel ruling, Hearing Examiner files MUP-97-053, MUP-97-054, MUP-97-055, Dept. Reference 9701617.)

Rationale: Code interpretations are more appropriately based on actual users of the industrial area and can be misapplied if based on incidental “users” of the area.

Act. LU-9 **Definition** of Research and Development. Amend the Land Use Code to adopt the following definitions for research and development as a means of determining whether the proposed use qualifies as a permitted use in IG2 and IG1 zones. No changes are proposed for the IC zones.

‘Research and development uses shall be defined and characterized as any **analytical** or investigational process or application directly related to, or in support of, the manufacture, assembly and repair of **materials**, tangible and **substantial goods**, or finished products.’

IG1- Research and Development: Allow Research and Development uses in the IG1 zone if they meet the following definition:

- A. Meets Criteria A for IG2 zones, and one or more of the following:
- B. The Research and Development facility must be integrally related to the creation, manufacture, assembly or repair of materials, tangible goods or finished products and consistent with the definition of industry recommended in the M and I Center Plan: and/or
- C. Existing Research and Development facilities may be expanded only if they are accessory to or supportive of an industrial process, based on the definition of industry recommended in the M and I Center Plan; and/or
- D. The Research and Development application incorporates or requires the use of materials, chemicals, or other substances or processes generally considered hazardous and/or incompatible with office, retail, or residential zoning, including air, noise, and light emissions: and/or
- E. The use would be permitted outright in buildings greater than 125,000 square feet in size which were existing as of January 1, 1998, with the stipulation that all operations must take place within the existing building and the existing structure cannot be expanded beyond current size or floor area ratio.

IG2- Research and Development: Allow Research and Development uses in the IG2 zone if they meet the following definition of Research and Development:

- A. “Research and Development uses shall be defined and characterized as any analytical or investigational process

or application directly related to, or in support of, the manufacture, assembly and repair of materials, tangible and substantial goods, or finished products.”

Rationale: The current land use code allows research and development uses of any type, including nonindustrial uses, to locate in the industrial zones. The above definition will assist in permitting by defining more clearly which types of research and development uses are appropriate for the industrial zones.

Code Amendments and Regulatory Changes

Act. LU-10 Analyze the need to revise **IG-1** and IG2 zone boundaries. The stewardship mechanism for this M and I Center Plan should conduct a study to determine possible boundary changes for **IG1** and **IG2** lands within the next 2 years.

Rationale: The scope of the M and I Center Plan did not provide for a detailed analysis of zoning boundaries and demand for land uses in specific locations. A detailed analysis is the next step in furthering the distinctions between the IG-1 and IG-2 zones.

Act. LU-11 Changes to Permitted Uses in the Land Use Code. Amend the Land Use Code to prohibit the following uses in **IG1** and **IG2** zones. (Please refer to the Plan Appendices Land Use Summary Matrix at the end of this Chapter to identify in greater detail proposed changes, conditions, size of use restrictions, time limits on allowable uses, permitted accessory uses, and other commentary.)

*Proposed Additional Prohibited Uses in **IG1***

- Medical Services,
- Animal Health Uses,
- Auto Sales and Rental,
- Lodging,
- Mortuary,
- Principal Use Parking,
- Performance Arts Center,
- Spectator Sports Facility,
- Lecture/Meeting Halls,
- Personal Transportation Services,
- Transit Vehicle Base,
- Institute for Advanced Study,
- Private Clubs,
- Museums,
- Primary and Secondary Schools,
- Community Center, (cont. next page)

*Proposed Additional Prohibited Uses in **IG2***

- Animal Health Uses,
- Auto Sales and Rental,
- Lodging,
- Mortuary,
- Performance Arts Center,
- Spectator Sports Facility,
- Motion Picture Theater,
- Personal Transportation Services,
- Transit Vehicle Base,
- Institute for Advanced Study,
- Private Clubs,
- Museums,
- Primary and Secondary Schools,
- Colleges,
- Community Center,
- Community Club, (cont. next page)

Proposed Additional Prohibited Uses in IG1

(cont. from prev. page)

- Community Club,
- Hospitals,
- Religious Facilities,
- Universities,
- Park and Pool Lots,
- Motion Picture Theatres
- Parking structures as principal use.

Proposed Additional Prohibited Uses in IG2

(cont. from prev. page)

- Hospitals,
- Universities,
- Parking structures.

Rationale: The industrial zones currently allow a broad range of nonindustrial uses to locate in them. A key strategy of the M and I Center Plan is to implement the Countywide Planning policies and the Seattle Comprehensive Plan by further restricting nonindustrial uses in industrial zones in order to preserve industrial lands for industrial uses.

Act. **LU-12** Size of Use Restrictions in the Duwamish M and I Center. Amend the Land Use Code to adopt the following size of use amendments in IG1 and IG2 zones. The size restrictions apply to rentable building space, not building footprint.

Size of Use Restrictions in IG1

- Commercial uses including retail, service, and office not integral to an allowed use is restricted to 10,000 square feet (sf) in size,
- Fast food and restaurants limited to 5,000 sf.,
- Taverns limited to 2,000 sf.,
- Brewpubs limited to 2,000 sf for the pub portion of the use.

Size of Use Restrictions in IG2

- Commercial uses including retail, service, and office not integral to an allowed use is restricted to 20,000 sf.,
- Taverns limited to 2,000 sf.,
- Lecture/Meeting Halls limited to 5,000 sf., and
- Unlimited office allowed in buildings larger than 125,000 sf. existing as of January 1998.

Rationale: The industrial zones currently allow large scale nonindustrial uses to locate in them. A key strategy of the M and I Center Plan is to implement the Countywide Planning policies and the Seattle Comprehensive Plan by further restricting the size of nonindustrial uses in industrial zones in order to preserve industrial lands for industrial uses.

Act. **LU-13** Time Limits to Allowable Uses in the Duwamish M and I Center. Amend the Land Use Code to adopt the following time limits as conditions for certain allowable uses in IG2 zones and the Shoreline Urban Industrial environment and provide appropriate means of enforcement.

**Time Limit Conditions
in IG2 (Zoning)**

- Park and ride lots allowed as temporary use for up to 10 years,
- Primary Use Parking (surface parking only) allowed as temporary use for up to 10 years.

**Time Limit Conditions
in UI Environment**

(Shoreline Master Program)

- Primary Use Parking allowed as temporary use for up to 10 years.

Rationale: The industrial zones currently allow large scale nonindustrial uses to locate in them. A key strategy of the M and I Center Plan is to implement the Countywide Planning policies and the Seattle Comprehensive Plan by further allowing interim nonindustrial uses as a means of keeping land in productive economic use while reserving it for longer term industrial uses. Time restrictions will ensure that the longer term industrial uses will occur. Enforcement measures are needed to limit land speculation and long-term parking use.

Act. LU-14 Allowable Accessory Use in the **Duwamish M and I Center**. Amend the Land Use Code to adopt the following uses as permitted accessory uses (but prohibited as principal uses in IG1 and IG2 zones).

Accessory Uses in IG1

- Child Care,
- Mini-Warehouse,
- Parking.

Accessory Uses in IG2

- Indoor and Outdoor Sports Facility,
- Mini-Warehouse.

Rationale: Nonindustrial uses that support industrial uses can be allowed as accessory uses, thus reserving the majority of the industrial land base for industrial uses.

Act. LU-15 Allowable Uses with Conditions in the Duwamish M and I Center. Amend the Land Use Code to allow the following uses with the specific conditions listed below.

**Uses with Conditions
in IG1**

- Passenger terminals but limited to water/rail dependent facilities,
- Vocational schools permitted if it includes industrial arts processes.

**Uses with Conditions
in IG2**

- Passenger Terminals (same as IG1),
- Vocation schools (same as IG1),
- Passenger transportation facilities allowed with the exception of taxis, limousines, and rental cars.

Rationale: Large scale uses could be permitted in the industrial zones if specific conditions are met which ensure that they relate to and support the industrial character of the M and I Center.

Act. LU-16 Amendments to the Shoreline Master Program. Amend the Shoreline Master Program to prohibit the following uses within the Shoreline Urban Industrial jurisdiction of the Duwamish (all lands within 200' of the shoreline) in the City's Shoreline Master Program:

- A. Restaurants,
- B. Taverns and brew pubs,
- C. Research and Development, (subject to the proposed definition found above in this document), and
- D. Mini warehouses as principal use (See Land Use Summary Matrix for more complete description of proposed restriction).

Rationale: The Shoreline Master Program currently allows nonindustrial uses on marine industrial lands, which encourages nonindustrial use of this very limited resource. The Master Program should be revised to prohibit nonindustrial uses such as restaurants to protect and preserve marine lands for marine industrial uses.

Act. LU-17 Amendments to **the** Shoreline Master Program. Amend the Shoreline Master Program to allow the following uses within the Shoreline Urban Industrial jurisdiction of the Duwamish (all lands within 200' of the shoreline) in the City's Shoreline Master Program:

- A. Marine retail,
- B. Parking and outdoor storage as a temporary principal use (up to 10 years) as a land banking strategy and as a means of allowing for economic use of lands while being assembled into larger parcels for marine industrial uses.

New Prohibited Uses in UI Environment

- . Restaurants,
- . Taverns and Brewpubs,
- . Research and Development which fails to meet the definitions prescribed in Action LU-9, and
- . Mini-Warehouse as Primary Use.

New Permitted Uses in UI Environment

- . Marine Retail,
- . Parking and Outdoor Storage as Primary Use, but subject to **10-year** time limit.

Rationale: Marine retail uses can support the marine industrial uses and should be permitted within the shoreline jurisdiction. Marine lands that are underdeveloped can be reserved for future marine industry while keeping them in economic productivity as and interim parking or outdoor storage uses.

Act. LU-18 Amend Seattle Land Use Code. Amend Seattle Land Use Code to acknowledge that residential uses are not compatible with industrial operations and that it is desirable to segregate industrial users from those that attract members of the general public. (Note: artist live/work studios would still be classified industrial, not residential, with appropriate enforcement mechanisms.)

Rationale:

Act. LU-19 First Avenue South Area Rezone. Adopt a rezone from IG2 to a modified IC Zone for the 1st Ave. S. Area bounded by First Ave. S., Railroad Ave. S., Western Ave., S. Royal Brougham, Utah Ave. S., S. Massachusetts St, Occidental Ave S., and S. Atlantic St. as shown on Figure 3-3. Use the 3.0 Floor-to-Area-Ratio and keep the existing 85-foot height limit. Maintain the M and I Center Boundaries; do not change Downtown Urban Center Boundaries. Keep the currently permitted and prohibited uses in the IC Zone except for the following:

<i>New Prohibited Uses in First Ave. S. Area IC Zone</i>	<i>New Permitted Uses in First Ave. S. Area IC Zone</i>
--	---

- | | |
|--|---|
| <ul style="list-style-type: none"> • Heavy Manufacturing, • High Impact Uses, • Recycling centers, • Solid Waste Transfer Facilities, • Animal Health, Kennel, and Animal Control, • Airport, Land and Water Based, • Sewage Treatment Plant, • Solid Waste Incinerator, • Hospital, and • Elementary /Secondary School. | <ul style="list-style-type: none"> • Eating-Fast Food (>750). |
|--|---|

<i>First Ave. S. Area IC Zone Change from Conditional Use to Permitted Use:</i>	<i>First Ave. S. Area IC Zone Change from Permitted Use to Conditional Use:</i>
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- | | |
|--|--|
| <ul style="list-style-type: none"> • Medical Services, • Lodging, and • Transit Vehicle Base. | <ul style="list-style-type: none"> • Religious facilities, • Colleges, • Universities, and • Major institutions. |
|--|--|

First Ave. S. Area IC Zone — Allow the Following Uses in New or Existing Buildings:

- Museums,
- Community Centers,
- Private Clubs,
- Community Club, and
- Artist/Studio Dwellings.

Rationale: The modified IC zone is tightly drawn, limited to the most impacted blocks adjacent to the stadia and SR 519 along 1st Avenue. These blocks would remain industrially zoned and within the M and I Center. The zone would restrict future development of heavy industrial uses incompatible with or no longer viable because of the crowds and traffic associated with the stadia and exhibition center, and allow future development of nonindustrial uses being restricted or eliminated in the IG1 or IG2 zones elsewhere in the Duwamish.

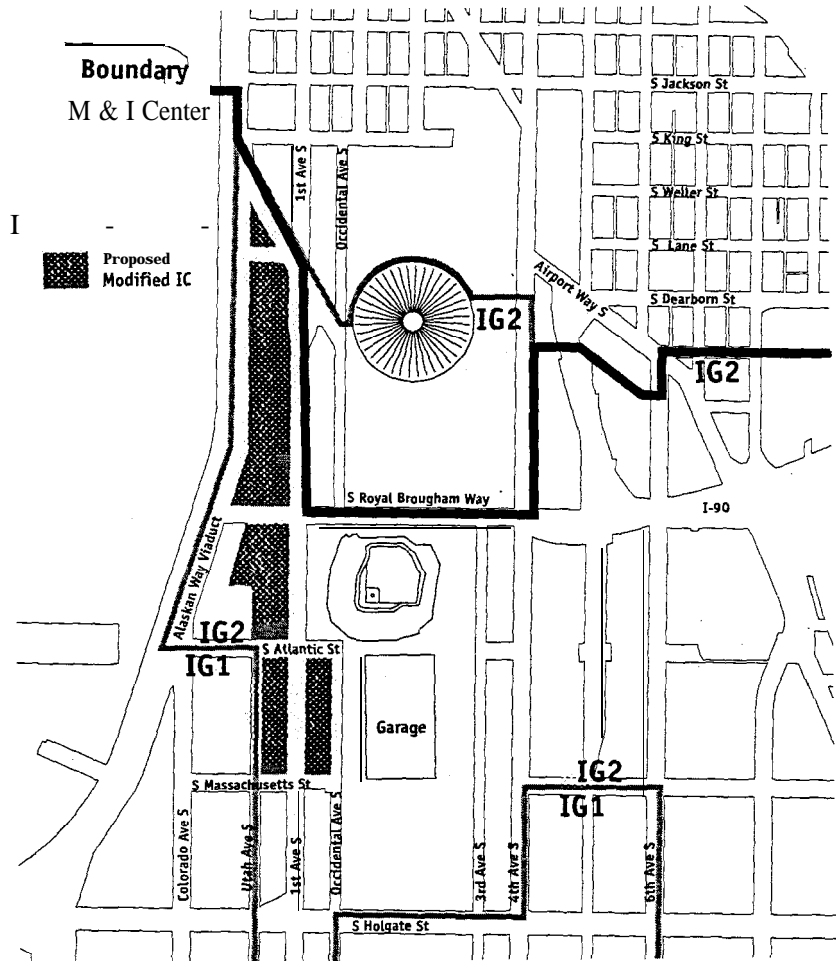


figure 3-3: Proposed First Ave S. Area Rezone

Source: Arai/Jackson Architects and Planners, 1999

Act. LU-20 Georgetown- Seattle Design/Gift Center. Change zoning in the area around the Seattle Design Center, Seattle Gift Center and Northwest Industrial Park from CI and IG2 to IC.

Rationale: This zone will acknowledge the existing mix of industrial and commercial uses while facilitating the growth of light industrial and commercial businesses supporting the international home fashion industry based in this part of the M and I Center. It would also accommodate other compatible uses to be restricted from IG1 and IG2.

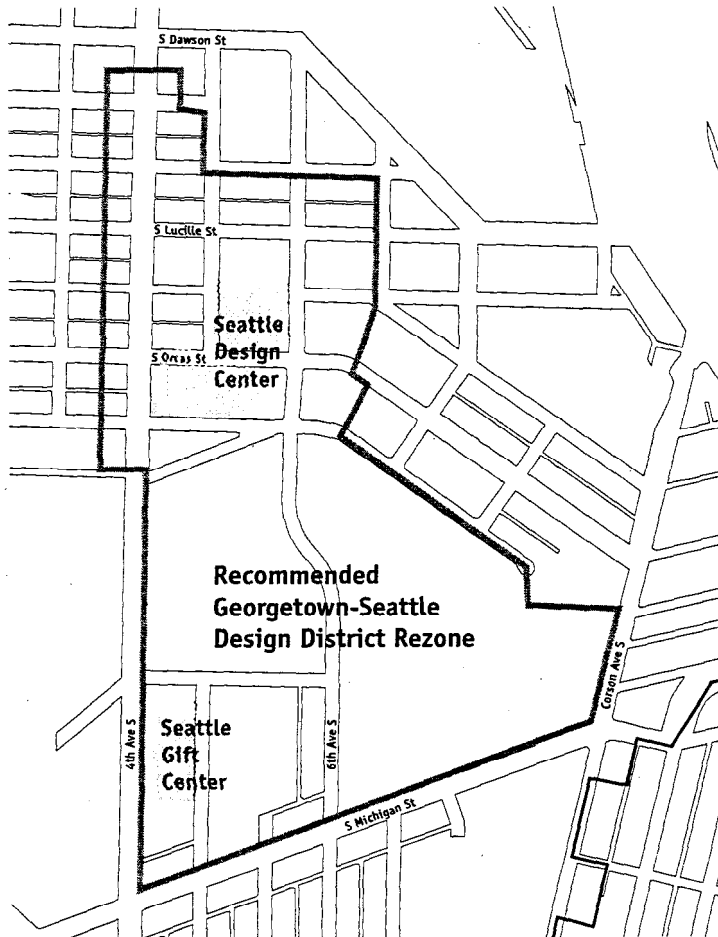


Figure 3-4: **Recommended** Georgetown-Seattle Design District Rezone

Source: *Arai/Jackson Architects and Planners, 1999*

Act. LU-21 Zoning Name Change. Amend the Land Use Code to rename the IB zone as Light Industry (LI). No other changes with respect to permitted uses, development regulations, or other code considerations are recommended.

Rationale: This name change would facilitate marketing to and encouraging appropriate industries to locate in this zone. The current name creates the impression of restricting all industries, including light industry.

Proposed Land Use Matrix

Notes:

- 1) The matrix format and use categories follow the existing use matrix in the Seattle Municipal Code.
- 2) Uses shown in bold italic are uses added or amended by the Committee.
P= Permitted, CU= Conditional Use, CCU= Council Conditional Use, EB= Permitted in Buildings existing before Oct 1987, X= Prohibited Use

Table 3-2: Proposed Land Use Matrix

Use	Existing IC	Modified IC	Existing IG1	Proposed IG1	Existing IG2	Proposed IG2	Comments
I. MANUFACTURING							
A. LIGHT MANUFACTURING	P	P	P	P	P	P	
B. GENERAL MANUFACTURING	P	P	P	P	P	P	
C. HEAVY MANUFACTURING	X/CU	X	P	P	P	P	NOTE: This category includes the manufacture of Group A hazardous materials, except Class A or B explosives see 23.50.014.B10a1 and the manufacture of Group B hazardous materials. see 23.50.014B10a2. Hazardous materials issues will be handled through the administration of the Building and Fire Codes
II. HIGH IMPACT USES	X/CU	X	X/CU	CU	X/CU	CU	NOTE: This category includes High impact uses as provided by Subsection B5 of 23.50.014 a, the lot is located so large concentrations of people are not exposed to unreasonable adverse impacts, b. management plan may be required. Hazardous materials issues will be handled through the administration of the Building and Fire Codes
III. COMMERCIAL USES							CONDITIONS: In IG1, Commercial and retail uses limited to 10,000 sf, In IG2, Commercial and retail uses limited to 20,000 sf
A. RETAIL SALES AND SERVICE							
1. Personal/ Household	P	P	P	P	P	P	
2. Medical Services	P/CU	P	P/CU	X	P/CU	P	
3a. Animal Health	P	X	P	X	P	X	
3b. Kennel	P	X	P	X	P	X	
3c. Animal Control Shelter	P	X	P	X	P	X	
4. Automotive Retail and service	P	P	P	P	P	P	CONDITIONS: All automotive and truck sales, services and retail permitted except auto sales, showrooms and rentals
5. Marine Retail Sales and Service	P	P	P	P	P	P	
6. Eating and drinking establishment							
6a. Eating-Fast food >750	CU	P	CU	P	CU	P	CONDITIONS: Permitted in IG1 if less than 5000 sf except prohibited within 200' of the waterfront (which is the Shoreline jurisdiction)
6b. Eating-Fast food <750	P	P	P	P	P	P	
6c. Restaurant with lounge	P	P	P	P	P	P	CONDITIONS: Permitted in IG1 if less than 5000 sf except prohibited within 200' of the waterfront (which is the Shoreline jurisdiction)
6d. Tavern	P	P	P	P	P	P	CONDITIONS: 2,000 sf size limit except prohibited within 200' of the waterfront
6e. Brewpub	P	P	P	X	P	P	CONDITIONS: 2,000 sf size limit to the pub portion of the use in IG2; brewery area is unlimited in size
7. Lodging	P	P	CU	X	CU	X	

Table 3-2: Proposed Land Use Matrix

Use	Existing IC	Modified IC	Existing IG1	Proposed IG1	Existing IG2	Proposed IG2	Comments
8. Mortuary	P	P	P	X	P	X	
8a. Crematorium		P		CU		CU	CONDITIONS: This sub-category added by the LU Sub-Committee. Funeral chapels prohibited
9. Existing Cemeteries	P		P	P	P	P	
10. New Cemeteries	X	X	X	X	X	X	
11. Custom Craft Studios				P		P	NOTE: This use added by the LU Sub-Committee to make it more explicit. Needs to be more strictly enforced in terms of being used as a residence
B. PRINCIPAL USE PARKING	P	P	P	X	P	P	CONDITIONS: Permitted in IG2 as a temporary use for up to 10 years
C. NON-HOUSEHOLD SERVICES	P	P	P	P	P	P	
D. OFFICE	P	P	P	P	P	P	CONDITIONS: : Permitted in IG1 and IG2 if directly and substantially related to a permitted industrial use. For office not related to a permitted industrial use, in IG1, office size is limited to 10,000 sf and in IG2, office size is limited to 20,000 sf. In buildings larger than 125,000 which were in existence as of January 1998 office not related to a permitted industrial use in unlimited in size.
E. ENTERTAINMENT							
1. Places of assembly							
1a. Performing Arts Center	P	P	P	X	P	X	
1b. Spectator Sports Facility	P	P	P	X	P	X	
1c. Lecture/Meeting Halls	P	P	P	X	P	P	CONDITIONS: Limited to 5,000 sf in IG2
1d. Motion Picture Theater	P	P	P	X	P	X	
1e. Theater-Adult	X	X	X	X	X	X	
1f. Adult Panorams	X	X	X	X	X	X	
2. Participant Sports and recreation							
2a. Indoor Sports and recreation	P	P	P	X	P	P	CONDITIONS: Permitted as an ancillary to a permitted primary use; prohibited as a primary use
2b. Outdoor Sports and recreation	P	P	P	X	P	P	CONDITIONS: Permitted as an ancillary to a permitted primary use; prohibited as a primary use
F. WHOLESALE SHOWROOM	P	P	P	P	P	P	
G. MINI-WAREHOUSE	P	P	P	P	P	P	CONDITIONS: Permitted as an ancillary to a permitted primary use; prohibited as a primary use and prohibited outright within 200' of the shoreline
H. WAREHOUSE	P	P	P	P	P	P	

Table 3-2: Proposed Land Use Matrix

Use	Existing IC	Modified IC	Existing IG1	Proposed IG1	Existing IG2	Proposed IG2	Comments
I. OUTDOOR STORAGE	P	P	P	P	P	P	NOTE: Permitted within the Shoreline jurisdiction (properties within 200' of the shoreline) as a temporary use for up to 10 years
J. TRANSPORTATION FACILITIES							
1. Personal transportation services	P	P	P	X	P	P	CONDITIONS: Personal transportation services permitted in IG2 except for taxis, limos, and rental cars
2. Passenger Terminal	P	P	P	P	P	P	CONDITIONS: Passenger terminals limited to water and rail dependent facilities
3. Cargo Terminal	P	P	P	P	P	P	
4. Transit Vehicle Base	CU	CCU	CU	X	CU	P	NOTE: Definition needs to be changed to include Commuter/Light Rail vehicle base.
5. Heliport	CCU	CCU	CCU	CCU	CCU	CCU	
6. Heliport	CCU	CCU	CCU	CCU	CCU	CCU	
7. Airport, land-based	CCU	X	CCU	CCU	CCU	CCU	
8. Airport, water-based	CCU	X	CCU	CCU	CCU	CCU	
9. Railroad switchyard	P	P	P	P	P	P	
10. Railroad yard with hump	X	X	CU	CU	CU	CU	
K. FOOD PROCESSING	P	P	P	P	P	P	
L. RESEARCH AND DEVELOPMENT LABORATORY	P	P	P	P	P	P	CONDITIONS: Permitted subject to new definition, see attached.
IV. SALVAGE AND RECYCLING							
A. RECYCLING COLLECTION STATION	P	P	P	P	P	P	
B. RECYCLING CENTER	P	X	P	P	P	P	
C. SALVAGE YARD	X	X	P	P	P	P	
v. UTILITIES							
A. UTILITY SERVICE USE	P	P	P	P	P	P	
B. MAJOR COMMUNICATIONS UTILITY	CU	CU	CU	CU	CU	CU	
C. MINOR COMMUNICATIONS UTILITY	P	P	P	P	P	P	
D. SOLID WASTE TRANSFER	CU	X	CU	CU	CU	CU	
E. POWER PLANT	CCU	CCU	P	P	P	P	
F. SEWAGE TREATMENT PLANT	CCU	X	CCU	CCU	CCU	CCU	
G. SOLID WASTE INCINERATOR	CCU	X	CCU	CCU	CCU	CCU	

Table 3-2: Proposed Land Use Matrix

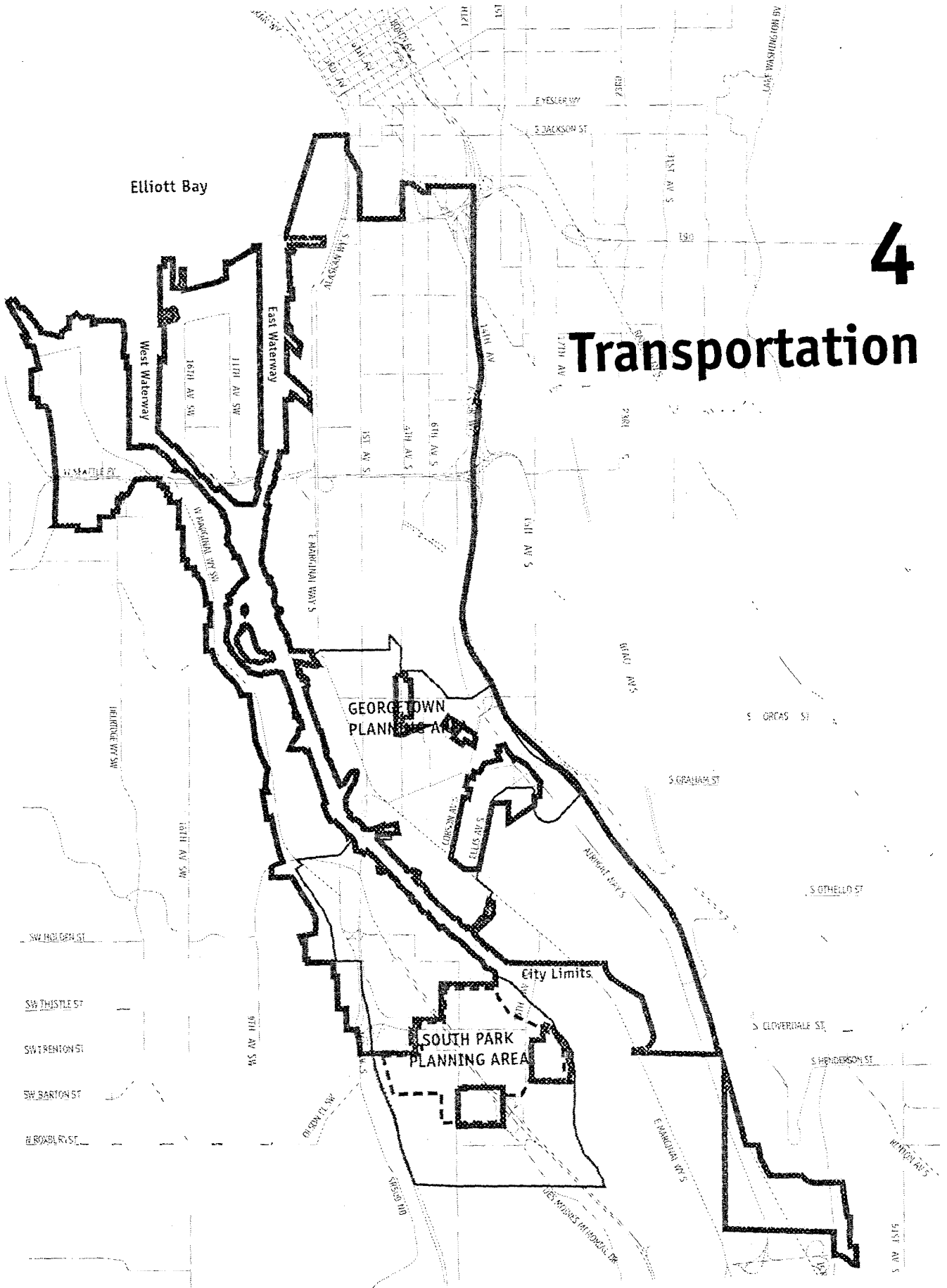
Use	Existing IC	Modified IC	Existing IG1	Proposed IG1	Existing IG2	Proposed IG2	Comments
H. SOLID WASTE LANDFILLS	X	X	X	X	X	X	
VI. INSTITUTIONS							CONDITIONS: New criteria for public facilities apply; see attached. Also see additional conditions for individual uses
A. INSTITUTE FOR ADVANCED STUDY	P	P	P	X	P	X	
B. PRIVATE CLUBS	EB	P	EB	X	EB	X	
c. CHILD CARE CENTER	P	P	P	P	P	P	CONDITIONS: Permitted in IG1 to serve employees of a permitted use, permitted as primary use in IG2
D. MUSEUM	EB	P	EB	X	EB	X	
E. SCHOOL - ELEMENTARY OR SECONDARY	EB	X	EB	X	EB	X	
F. COLLEGE	EB	CU	EB	X	EB	X	
G. COMMUNITY CENTER	EB	P	EB	X	EB	X	
H. COMMUNITY CLUB	EB	P	EB	X	EB	X	
I. VOCATIONAL SCHOOL	P	P	P	P	P	P	CONDITIONS: Permitted if classes include industrial art processes
la. Fine Arts School	P	P	P	CU	P	P	CONDITIONS: This sub-category added by the LU Sub-Committee. Permitted if classes include industrial art processes.
J. HOSPITAL	CU	X	EB	X	EB	X	
K. RELIGIOUS FACILITY	EB	CU	EB	X	EB	EB	
L. UNIVERISTY	EB	CU	EB	X	EB	X	
M. MAJOR INSTITUTIONS	EB	CCU	EB	X	EB	X	
VII. PUBLIC FACILITIES							CONDITIONS: New criteria for public facilities apply; see attached. Also see additional conditions for individual uses
A. JAILS	X	X	X	X	X	X	
B. WORK RELEASE CENTERS	X	X	X	X	X	X	
C. Other Public Facilities	CCU	CCU	CCU	CCU	CCU	CCU	CONDITIONS: New criteria for public facilities apply; see attached. Also see additional conditions for individual uses
VIII. PARK AND POOL/RIDE LOTS							
A. PARK AND POOL LOTS	P	P	P	X	P	P	
B. PARK AND RIDE LOTS	CU	CU	CU	X	CU	P	CONDITIONS: Permitted in ZG2 as a temporary use for up to 10 years
IX. RESIDENTIAL							
A. SINGLE FAMILY	X	X	X	X	X	X	

Table 3-2: Proposed Land Use Matrix

Use	Existing IC	Modified IC	Existing IG1	Proposed IG1	Existing IG2	Proposed IG2	Comments
B. MULTI-FAMILY	X	X	X	X	X	X	
C. CONGREGATE CARE	X	X	X	X	X	X	
D. ADULT FAMILY HOMES	X	X	X	X	X	X	
E. FLOATING HOMES	X	X	X	X	X	X	
F. MOBILE HOME PARK	X	X	X	X	X	X	
G. NURSING HOMES	X	X	X	X	X	X	
H. ARTIST'S STUDIO/DWELLING	EB/CU	CU	EB/CU	EB/CU	EB/CU	EB/CU	
I. CARETAKER'S QUARTERS	P	P	P	P	P	P	
J. RESIDENCE IN LANDMARK BUILDING	CU	CU	CU	X	CU	CU	
X. OPENSOURCE							
A. PARKS	P	P	P	P	P	P	
B. PLAYGROUNDS	P	P	P	X	P	X	
XI. AGRICULTURAL USES							
A. ANIMAL HUSBANDRY	X	X	X	X	X	X	
B. HORTICULTURAL USES	X	X	X	X	X	X	
C. AQUACULTURE	P	X	P	P	P	P	

4

Transportation



Transportation

Introduction

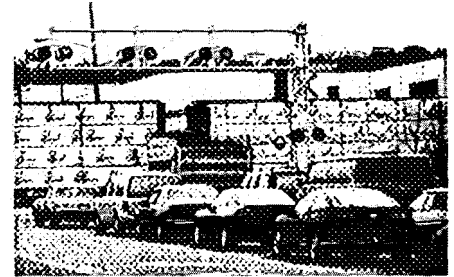
Role of the M and I Center

The Greater Duwamish Manufacturing and Industrial (M and I) Center is a vital international trade and transportation crossroads, receiving and distributing goods via roadway, water, rail and air. It is home to the Port of Seattle's primary shipping operations, the main Amtrak and freight rail yards for Washington State and the intersection of major interstate highway routes. Commerce generated throughout the United States and Canada moves through the area on its way to and from Alaska and countries throughout the Pacific Rim. The transportation system within the M and I Center plays a crucial role in the movement of these goods and services and holds economic implications for the entire state and Pacific Northwest region. An efficient transportation system is imperative to maintain the economic viability of regional businesses and sustain Puget Sound's family-wage industrial job base.

In addition to the significance of this district as a regional and international trade center, most local businesses rely on the available land-base and transportation facilities to manufacture, distribute, and store goods and provide services for the Puget Sound region and greater Western Washington. Over 70 percent of the total employment base within the district is generated by small businesses. As such, the local transportation needs of small industrial properties within the area weigh heavily in the development of long-range transportation solutions and land-use decisions for the M and I Center and its regional arterial connections.

The importance of transportation and trade distribution within the planning area can be measured as well; 21 percent of all City of Seattle B & O tax and four percent of City of Seattle property tax revenue is generated within the Duwamish M and I Center. This fact is too often ignored when decisions are made regarding the investment of public dollars for transportation infrastructure, or in the consideration of major land-use decisions. Recent decisions have increased the influx of incompatible uses and seriously strained the viability of industrial businesses. Construction of the new sports facilities has generated complex transportation issues with regard to traffic flow involving freight mobility, business access, parking and east-west transit within the Duwamish area. These projects have assumed higher priority than desperately needed transportation infrastructure improvements in the M and I Center.

One of the most difficult challenges facing the Greater Duwamish Manufacturing and Industrial Center is the cumulative impacts of the numerous major construction projects in progress throughout the area. Significant decisions drastically impacting the M and I Center are being made in a short period of time. Lack of coordination among the various projects, their timing, design process and implementation have made it extremely difficult for industrial business, property owners, and concerned citizens to react and respond adequately. Additional issues within this complex area of



Seattle include competing demands for available transportation facilities, modal conflicts, conflicting land uses and the conversion of land to nonindustrial uses.

Existing Conditions

Competing Demand for Available Transportation Capacity

While a high demand is placed on distributing goods and services within the area, additional capacity for other transportation needs within and throughout the M and I center competes for space on limited arterial facilities. Commuter travel through the district, as well as traffic destined for the freeway system and ferry terminal, make east-west movement through the area highly congested throughout the workweek. In addition, recently approved special event centers in the north Duwamish area will aggravate this existing congestion and displace valuable parking access for local businesses more frequently. The plan attempts to address each of these competing transportation needs in a comprehensive manner by suggesting alternative methods for improving commuter travel, increasing access to under-utilized corridors, and accommodating special event facilities while minimizing their impacts in the north Duwamish and Georgetown areas.

Modal Conflicts

Coupled with the limited number of regional arterial connections through this complex district, a continual barrage of conflicting modal interfaces and systems conflicts disrupt and impact travel times of people and goods. While many of these conflicts are obvious (i.e., at-grade rail crossings), modal issues related to accommodating truck movements in the context of general purpose traffic, pedestrian and bicycle facilities within the district, special event traffic, and constructing appropriate new facilities with local and regional circulation as the major goal are each addressed in this element.

Cumulative Impacts of Large Projects

While there are many major transportation improvements and land use actions planned and proposed in the study area, many of these projects have not considered the cumulative effect these decisions will have on the transportation system as a whole. As an example, phases 1 and 2 of the SR 519 project, the Spokane Viaduct widening, the new sports stadiums and exhibition center, sidewalk widening, Ring County-Metro route consolidation, and proposed ramps to the Alaskan Way viaduct will have a profound affect on circulation, access, congestion, and the capacity of the 1st Avenue S corridor between Spokane Street and Jackson. Cumulative impacts of these major infrastructure investments and significant changes in land use were considered in developing this long range transportation improvement plan for the M and I Center.

To address cumulative impacts to 1st Avenue S and many other transportation facilities within the district, careful thought and consideration were given by the Greater Duwamish Planning Committee (GDPC) Transportation Subcommittee, to the evaluation of transportation investment strategies. Many larger projects were separated into distinct components that had a greater impact or benefit to circulation and access to the area. Conse-

quently, critical components of transportation investment were weighed against beneficial criteria established to address the concerns of the M and I Center.

Improvement of Existing Facilities

A majority of the land within the center was created through significant earthwork and “fill” during the early days of the City. As such, many subsurface issues remain in terms of accommodating heavy vehicles on arterial and non-arterial roadways with substandard pavement substructure and poor surface water drainage conditions. Much of these conditions exist on non-arterial roadways which are not funded or maintained through regular City programs. Consequently, roadway improvement strategies to fund roadway rehabilitation and drainage deficiencies on non-arterial local access roads, as well as developing maintenance programs and new design standards, are important recommendations of the M and I Center Plan. These strategies give freight mobility access and circulation within the district highest priority among the recommendations.

Potential Solutions

In addition to the following capital projects and operational changes recommended, other creative solutions are available to deal with many of the challenges. For instance, while high-cost road improvements are necessary to address freight-related traffic congestion, some improvements could be achieved much more quickly, and at much less expense, through effective use of Intelligent Transportation Systems (ITS) technology. ITS refers to a wide range of information tools that can be used to base traffic management systems on real-time information about existing and pending traffic conditions. This technology could be highly effective in dealing with the intermodal traffic conflicts in the Duwamish involving cars and trucks with rail and maritime shipping operations that are fairly predictable.

SEATRAN developed a Duwamish ITS proposal in 1998 that would link traffic control systems at 90 intersections for a cost of about \$5 million. The city should take a leading role in funding and implementing such a system in partnership with regional, state and federal agencies, and the private sector.

Goals and Strategies

This section identifies transportation goals and strategies recommended by the Greater Duwamish Planning Committee to guide the future development of transportation infrastructure within the M and I center. Given the 20-year planning horizon of this effort, some of the goals and individual strategies developed below may not be consistent or relevant to conditions in the short term. However, the GDPC wants to guarantee the successful implementation of its long term vision by ensuring that general mobility and freight movement are not compromised by a lack of strategic planning on transportation or land use decisions. A number of governmental agencies as well as private business and other stakeholders were consulted in developing these strategies. This list includes the City of Seattle, the Washington State Department of Transportation, the Port of Seattle, King

County-Metro, Sound Transit, local business and property owners, residents and adjacent neighborhoods, and other stakeholder groups within the M and I Center.

The intent of the Plan is to accommodate all modes and user groups within the study area. As such, general goals have been divided into key strategies to address specific features of the transportation system in the M and I Center, and to consider specific modes of transportation important to the continued success of freight mobility within and through the area.

Goal T1: Improve General Mobility and Access.

- Pol. T 1.1 Improve signal coordination to enhance mobility for both north-south and east-west traffic flow. Employ the use of protected plus permitted phasing to minimize delay for left turn movements on major corridors.
- Pol. T 1.2 Maintain and improve area-wide access throughout the M and I Center through the use of signal coordination, roadway channelization, grade separation, elimination of modal conflicts, and pavement rehabilitation to the existing roadway system.
- Pol. T 1.3 Discourage commuter through-traffic on 1st Avenue S and 4th Avenue S through access improvements to alternative corridors such as Airport Way and SR 99.
- Pol. T 1.4 Maximize use of existing roadway infrastructure and maintain existing capacity through channelization and roadway improvements that improve access to under-utilized facilities.
- Pol. T 1.5 Maintain the South Park Bridge (14th Street S/16th Street S) as a critical arterial link across the Duwamish Waterway and between the South Park neighborhood and regional transportation corridors and maintain the ability to remain operable to accommodate marine traffic.
- Pol. T 1.6 Maintain vehicular capacity of existing roadways and bridges.
- Pol. T 1.7 No at-grade arterial/rail crossings should be closed without constructing appropriate grade separations.

Goal T2: Eliminate Conflicts Between Modes.

- Poi. T 2.1 Grade separate major east-west corridors within the M and I Center to reduce and/or eliminate conflicts between vehicular and rail modes to improve safety and mobility for pedestrians, bicycles, vehicles and trucks.
- Pol. T 2.2 Retrofit bicycle and pedestrian facilities through the Duwamish to minimize conflicts between bicycles, pedestrians, trucks, and general traffic.

Goal T3: Maintain and Improve Freight Mobility within the M and I Center.

- Pol. T 3.1 Maintain and improve east-west mobility throughout the area, particularly along three major east-west corridors for moving freight and goods: Royal Brougham Way (SR 519), Spokane Street, and Michigan Street.

- Pol. T 3.2 Improve designated truck routes and roadways within the M and I Center to maintain efficient movement of freight.
- Pol. T 3.3 Maintain reasonable access to regional transportation facilities (such as the Spokane Street Viaduct) for goods and service distribution from all areas of the M and I Center.
- Pol. T 3.4 Develop truck standards and policies for efficient movement of freight.
- Pol. T 3.5 Improve turning radii for truck movements at key intersections and along key corridors to enhance freight mobility.
- Pol. T 3.6 Maintain and enhance intermodal freight connections between the State highway system, rail yards, barge terminals, Port terminals and facilities, airports, and warehouse/distribution centers.
- Pol. T 3.7 Design and schedule construction of transportation projects so that disruption to mobility within the M and I Center is minimized.
- Pol. T 3.8 Coordinate roadway repairs with the City of Seattle Transportation Department (SEATRAN) so that priority is given to those facilities that are critical to freight mobility.

Goal T4: Preserve Existing Facilities and Construct Appropriate New Facilities.

- Pol. T 4.1 Existing City policies address only arterial roadways within the district. As such the City, in cooperation with property and business owners in the area, should develop funding sources for rehabilitation and drainage improvements on non-arterial, local access roads.
- Pol. T 4.2 Identify and mitigate the cumulative impacts of transportation projects.
- Pol. T 4.3 Apply design standards for freight systems and inter-modal connections appropriate for use during the repair or construction of designated freight corridors.

Goal T5: Minimize Impacts of Special Events.

- Pol. T 5.1 Maximize the use of the E-3 busway to expedite the movement of event patrons into and out of the M and I Center.
- Pol. T 5.2 Encourage prepaid event parking to minimize vehicle congestion in the stadium and exhibition center vicinity.
- Pol. T 5.3 Encourage the use of remote parking and shifting event attendees onto existing and future public transportation services.
- Pol. T 5.4 Maintain priority parking for local businesses during special events.
- Pol. T 5.5 Maintain employee and customer mobility throughout the M and I Center in general, and particularly in the vicinity of special event centers.

- Pol. T 5.6 Develop enhanced notification and public outreach efforts by SEATRAN for users, businesses, and property owners within the M and I Center prior to final decisions being made on reconstruction of existing facilities or the development of new transportation systems.

Goal T6: Provide Safe Transportation Infrastructure.

- Pol. T 6.1** Reduce or eliminate conflicts between travel modes.
- Pol. T 6.2** Work with SEATRAN to identify and prioritize intersection improvements at high accident locations.

Goal T7: Improve Rail Operations.

- Pol. T 7.1 Increase speed limits imposed on trains to reduce the length of time grade crossings are blocked.
- Pol. T 7.2** Improve the speed and reliability of rail operations through rail switching and signal enhancements.
- Pol. T 7.3 Grade separate mainline rail crossings through the Duwamish M and I Center to enhance speed and reliability for passenger and freight rail operations.
- Pol. T 7.4 Maintain access to local spur rail lines.

Goal T8: Increase the Use of Public Transportation.

- Pol. T 8.1 The City should provide assistance and encourage voluntary participation in Commute Trip Reduction (CTR) programs within the M and I Center through improvements to transit service, employer pass subsidies, and encouragement of carpool and vanpool use.
- Pol. T 8.2 Encourage King County-Metro to improve transit service for moving employees to and throughout the M and I Center.
- Pol. T 8.3** Ensure that any development of light rail facilities in the vicinity of Lander Street, or elsewhere within the M and I Center, does not adversely impact truck and rail mobility or access to local businesses and property, or if impacts occur, they are appropriately mitigated.
- Pol. T 8.4 Ensure that the expansion of the King County-Metro Ryerson Base, or any other transit-related facilities within the M and I Center, does not adversely impact truck and rail mobility or access to local businesses and property.

Goal T9: Maintain International Waterborne Transportation Facilities.

- Pol. T 9.1** Maintain the Duwamish Waterway and Elliot Bay as waterways for waterborne goods movement and maintain deep harbor docking space in Elliot Bay.
- Pol. T 9.2 Maintain convenient waterborne and roadway access to all existing and expanded seaport facilities to ensure that the M and I Center maintains its role as a vital west coast port facility.

- Pol. T 9.3 Maintain and improve intermodal connections for waterborne freight.
- Pol. T 9.4 Consistent with Federal law, maintain priority access for waterborne freight through the Duwamish Waterway over general vehicular bridge traffic.

Goal T10: Maintain and Expand Goods Movement via Air.

- Pol. T 10.1 Preserve access for air cargo and air operators at the King County Airport.
- Pol. T 10.2 Work with King County to maintain or expand air capacity at the King County Airport.

Recommended Actions/Strategies

Transportation Investments

Given the complex mixture of land uses, transportation systems, and modal needs within the M and I Center, the consideration of strategic investment in specific improvements is of paramount importance to the continued economic health of this area. While the movement of freight and goods throughout the area is of critical importance to the region's economy, the GDPC recognizes that a successful transportation plan must also accommodate many of the other transportation needs within and through this industrial district. The following pages outline GDPC recommended transportation investments in capital projects, operation and maintenance programs, and safety improvements for the M and I Centers.

While several of these projects have secured funding sources to implement them, funding mechanisms are not in place to implement all of them. Funding and implementation strategies were developed by the GDPC to guide the successful implementation of this element as well as support the economic and land use elements of the Plan.

The top 10 capital investment priorities are:

1. SR 519 Intermodal Access Project Phase 1 (Atlantic Street grade separation) and Phase 2 (Royal Brougham grade separation),
2. Lander Street grade separation,
3. East Marginal Way grade separation south of Spokane Street,
4. Southbound on-ramp to SR 99 at or north of Royal Brougham,
5. SR 99 Northbound on-ramp at Hanford Street,
6. Preserve and/or replace the South Park Bridge (14th/16th Avenue S), as structural integrity warrants,
7. Hanford Street overcrossing and grade separation from Hanford T-ramp across to east side of railroad,
8. Off-mainline rail improvements south of Spokane Street,
9. Spokane Street Viaduct Widening in conjunction with Lander Street grade separation, and
10. Holgate Street grade separation.

Matrix of Capital, Operation and Maintenance Recommendations

The following matrix identifies the recommended capital, operation and maintenance actions which will implement the M and I Center Plan.

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Capital 1 Phase 1	Regional Circulation Grade separation of east-west corridors	GDPC 3: SR 519 Intermodal Access Project Phase 1, Atlantic Street grade separation. Reference Code: AD1-4)	Grade separate Atlantic Street from 1 st to 4 th Avenues, construct on-ramps to I-90. Vehicular movement would be one-way eastbound once Phase I is complete. Phase I initially would result in two-way traffic on the Atlantic Street grade separation.	Significantly improves access/egress to freeway system from northern Duwamish area and special event facilities. Most effective once Phase II is completed of the SR 519 project. Improves access to Port container facilities. Would reduce traffic on Royal Brougham by shifting some freeway-bound traffic to Atlantic Street. Grade separation of M and I Center addresses east-west access issues	Increases regional traffic on 1 st and 4 th Avenues. Does not address east-west access issues for the study area south of the Stadiums.
Capital 1 Phase 2	Regional Circulation Grade separation of east-west corridors	GDPC 5: SR 519 Intermodal Access Phase 2, grade separate Royal Brougham. Reference Code: AD2-1)	Grade separate Royal Brougham between I-90 ramp and Occidental, modify 4 th Avenue on/off ramps. Vehicular movement would be one-way westbound. Provision for at-grade left-turning movements from Royal Brougham to 1 st Avenue must be maintained in design for truck movement and local access needs.	Significantly improves access/egress to freeway system from northern Duwamish area and special event facilities. Improves access to Port container facilities. Eliminates railroad grade crossing conflicts on Royal Brougham reducing vehicle delay by an average of 4 minutes per vehicle when train movements occur. An additional reduction in vehicle delay would result through elimination of signalized intersection movements that are currently required to access the 4 th Avenue S freeway ramps from Royal Brougham. This reduction in vehicle delay is estimated at an additional 30 seconds in westbound egress and an additional 60 seconds in access to the 4 th Avenue S freeway ramps.	The second phase needs to be built out as expeditiously as possible since delays will cause negative transportation impacts.
Capital 2	Local Circulation Grade separation of local east-west corridors.	GDPC 11: Lander grade separation: Reference Code: AD2-3)	Grade separate Lander Street across railroad tracks from 1 st to 4 th Avenues.	Provides grade-separated crossing of railroad tracks in a central location within the north M and I Center, reducing delays for east-west traffic. Provides for mitigation to address access issues with the planned development of the Spokane Street Viaduct (Capital 10).	If only one grade-separated facility is constructed, it would draw traffic from the industrial area between Atlantic Street and the Spokane Street Viaduct during rail crossings.
Capital 3	Regional Circulation Improve access between local roadways and existing/new freeway systems.	GDPC 9: East Marginal Way grade separation south of Spokane Street. (Reference Code: AD1-9) Northbound overpass and southbound on-ramp to SR 99.	Construct northbound overpass to East Marginal Way and Southbound on-ramp to SR 99 to grade separate East Marginal Way and Harbor Island lead track.	Improves mobility for freight and goods. Improves rail operational efficiency and eliminates at-grade conflicts.	

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Capital 4	Local Circulation Improve access between local roadways and existing/new freeway systems.	GDPC 10: SR 99 half-interchange. (Reference Code: AD2-2) southbound on-ramp at or north of Royal Brougham	Construct southbound on-ramp to SR 99 at or north of Royal Brougham to provide a direct connection between Alaskan Way viaduct and local businesses.	<ul style="list-style-type: none"> Provides an alternative route from the North Duwamish without disruption to local trips. Allows improved access for local business and Stadium activities. Will decrease traffic on I-5 south of Atlantic. Northerly location removes downtown commuter traffic from industrial area 	
Capital 5	Local Circulation Improve access between local roadways and existing/new Freeway systems. Grade separation of local east-west corridors.	GDPC 13a: Hanford T ramps to SR 99: (Reference Code: AD2-5) northbound on-ramp	Construct northbound on-ramp at Hanford Street, grade separate Hanford across railroad tracks to Utah Avenue.	<ul style="list-style-type: none"> Hanford Street is centrally located within the Industrial District, would serve the needs of the neighborhood and would provide adequate stadium access. 	May adversely impact access to businesses and properties, including the BNSF SIG yard.
Capital 6	Local Circulation Improve access between local roadways and existing/new freeway systems.	Preserve and/or replace, as structural integrity warrants, the South Park Bridge (14 th /16 th Avenue S).	As necessary, through replacement or rehabilitation maintain existing capacity and function of South Park Bridge (14 th /16 th Avenue S).	<ul style="list-style-type: none"> Maintains vital access across the Duwamish Waterway for local and regional trips. 	Significant short-term construction impacts may occur as a result of any rehabilitation or replacement.
Capital 7	Local Circulation Grade separation of local east-west corridors.	GDPC 12: Hanford Street overcrossing and extension: (Reference Code: AD2-4)	Grade separate Hanford Street across railroad tracks from 1 st to 4 th Avenues, extend across Union Pacific tracks to 6 th Avenue.	<ul style="list-style-type: none"> Provides grade-separated crossing of railroad tracks in a central location within the north M and I Center, reducing delays for east-west traffic. 	If only one grade-separated facility is constructed, it would draw traffic from the industrial area between Atlantic Street and the Spokane Street Viaduct during rail crossings.
Capital 8	Enhance rail infrastructure to maintain efficient operation.	GDPC 23: Off-mainline rail improvements. (Reference Code: AD1-10)	Realign tracks along Duwamish Avenue beneath East Marginal Grade Separation. Tied into AD1-9.	<ul style="list-style-type: none"> Reduces grade crossing delays on E Marginal Way from increasing train traffic to Terminal 5, Harbor Island, and West Seattle Businesses on West Marginal Way. Improves efficiency of UP and BNSF rail systems 	

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Capital 9	Regional Circulation Safety	GDPC 59: Spokane Street Widening. Reference Codes: AD1-8. and AD1-12)	Widen viaduct lanes to 12 feet add 32" barrier in center, construct new westbound on/off ramps at 1 st Avenue.	Improves safety of limited access operation. Eliminate inadequate weaving areas and ramp junctions. Provides for a center barrier to reduce the potential for head-on collisions. Reduce delays for vehicles exiting I-5 to westbound Spokane Viaduct Reduces delays for vehicles traveling from southbound 1 st Avenue to westbound Viaduct. Strengthens viaduct to withstand major earthquake.	<ul style="list-style-type: none"> May increase commuter traffic on 1st Avenue due to reduction in delay at Viaduct on-ramp. Increased access time for businesses located south of the Viaduct, who would have to travel as far north as Lander Street and then back south on 1st Avenue to access the Viaduct westbound. Would likely increase traffic volume on 1st Avenue north of viaduct Lander grade separation (Capital 3) would mitigate decreased access as a result of the Spokane Street access changes.
Capital 10	Local Circulation Grade separation of local east-west corridors.	GDPC 11: Holgate grade separation: Reference Code: AD2-3)	Grade separate Holgate Street across railroad tracks from 1 st to 4 th Avenues.	provides grade-separated crossing of railroad tracks in a central location within the north M and I Center, reducing delays for east-west traffic.	<ul style="list-style-type: none"> If only one grade-separated facility is constructed, it would draw traffic from the industrial area between Atlantic Street and the Spokane Street Viaduct during rail crossings.
Capital 11	Local Circulation Improve access between local roadways and existing/new reeway systems.	GDPC 17: Remote holding area for Colman ferry terminal. Reference Code: WSF-1)	Use WOSCA site as remote holding facility for ferry traffic at Colman dock, routing ferry traffic to dock via Alaskan Way.	Would reduce future queuing and congestion in the vicinity of Colman dock.	<ul style="list-style-type: none"> This project site is set aside for transportation purposes only. No additional land uses should be developed on the site that conflict with the transportation enhancements that the site is intended for.
Capital 12	Local Circulation Improve access between local roadways and existing/new reeway systems.	GDPC 1: Alaskan Way Realignment under viaduct to accommodate SR 519 improvement. Reference Code: AD1-1)	Move BNSF rail spur 30 feet west to provide downtown waterfront access unimpeded by rail operations and improve local surface streets accessing the Atlantic Street grade separation.	Separates waterfront traffic from railroad tracks (rail activity across Royal Broughan between 1 st and Alaskan Way is projected to increase.) Improves port access by separating port/rail yard truck traffic from general traffic	<ul style="list-style-type: none"> Indirect routing from I-5/90 to the south on East Marginal Way Closes Atlantic Street access to waterfront. Circulation improvements appear to benefit traffic destined for downtown and waterfront, rather than industrial area traffic.
Capital 13	Local Circulation Improve access between local roadways and existing/new reeway systems.	GDPC 6: S Boeing Access Road interchange. Reference Code: CIP-7)	Improve access to I-5 from S Boeing Access Road, Airport Way, and Martin Luther King Jr. Way through reconfiguration of interchange.		

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Pavement Management and Drainage					
O and M	Pavement Maintenance and Drainage Program. Maintain roadways within Greater Duwamish area to allow for safe passage of vehicles, pedestrians, and goods movement.	GDPC 27: Repair existing roadway surfaces where failures may cause harm to vehicles or pedestrians and install surface water drainage systems to ensure longevity of street infrastructure. (Reference Code: G-1)	Repair significant arterial pavement failures throughout the M and I Center. Projects include: <u>North Duwamish</u> Horton between 4 th Avenue S and East Marginal Way, Lander Street between 1 st Avenue and 4 th Avenue, rail crossings along the entire length of Holgate and on Occidental and Stacy, Occidental from Lander to Horton, the entire length of Spokane Street to Airport Way including rail crossings, and 6 th Avenue S (shoulders) from Massachusetts to Lander. <u>Georgetown</u> 4th Avenue S at S Michigan Street, 3rd Avenue S; between S Dawson Street and S Lucile Street, S Fidalgo Street; between 1st Avenue S and 4th Avenue S, and S Hudson Street at 1st Avenue S. <u>South Park</u> All streets bounded by 7 th Ave S, SR 99, the Duwamish Waterway, and Southern Street	<ul style="list-style-type: none"> Improves safety, structural integrity, and visual character of the roadway systems in M and I Center Would significantly increase the durability and life expectancy of pavement structures through this district and likely "pay for itself" over time as pavement rehabilitation needs diminish 	<ul style="list-style-type: none"> Lack of communication in the past has resulted in non-critical areas within the M and I Center being re-paved while significant street failures remain un-addressed. May require local funding by business/property owners to achieve improvements on an areawide basis
O and M	Pavement Management Program	GDPC 28: In coordination with SEATRANS, establish a program that identifies localized maintenance and preservation of public roadways and sidewalks within the M and I Center. (Reference Code: G-18)	Business and community representatives should review and evaluate with City staff the need to evaluate and improve on roadway maintenance and preservation issues. Explore the need to initiate a local improvement district or other such funding mechanism to fund existing and future pavement, drainage, and sidewalk issues.	A concentrated effort by City and community stakeholders could mutually benefit the transportation infrastructure needs.	<ul style="list-style-type: none"> Additional taxes or costs born by property owners in M and I Center.
Truck Mobility					
O and M	Improve local circulation for truck movements.	GDPC 20: Improve intersection of S Corson Avenue and S Michigan Street for truck turning movements. (Reference Code: G-11)	Improve turning radii for northbound and southbound turn movements onto freeway.	<ul style="list-style-type: none"> Improves truck circulation and access to freeway for freight and goods movement. Improves local circulation for freight and goods 	<ul style="list-style-type: none"> Encourages truck use on a non-Major Truck Street that is fronted by residential uses on one side.
O and M	Improve local circulation for truck movements.	GDPC 18: Provide direct access to 4 th Avenue S from heavy industrial properties south of East Marginal Way. (Reference Code: G-4)	Improve signal and lane assignments to allow for direct movements from S River Street to 4 th Avenue S across E Marginal Way to reduce circuitous routing.	<ul style="list-style-type: none"> Improves local and regional freight and goods mobility. Improves access onto E Marginal Way and 4th Avenue S from industrial properties west of East Marginal Way. 	

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Truck Mobility					
O and M	improve access between local industrial districts and regional freeway/arterial systems for truck movements	Develop truck corridor through the Riverside Industrial District in South Park between SR 99 and 4 th Avenue S/South Park bridge.	Acquire right-of-way, and improve streets to truck/commercial street standards for cross-section, pavement structure, and drainage on the following route segments: <ul style="list-style-type: none"> • S Holden Street -from SR 509 to 5th Avenue S • Holden alignment east of 5th Avenue S to Riverside Drive/8th Avenue S • Dallas Avenue S/10th Avenue S from 14th Avenue S to S Kenyon Street. If this route is not feasible, develop improve Kenyon Street between 7 th and 8 th Avenue S.	Improves safety and access for commercial vehicles, employees and business traffic into South Park Industrial Area 1 via SR 509 and SR 99. Eliminates the need to improve S Kenyon Street for local truck mobility. Provides for a better, more direct truck route through the Riverside Industrial District than the default Kenyon route.	Property acquisition required to provide a direct truck route between SR 99 and the South Park bridge.
O and M	Truck Mobility improve local circulation for truck movements.	GDPC 57 : intersection Turning Radius improvements.	The Committee recommends improvements to intersections where truck turning movements are Impeded due to insufficient turning radii. <u>Georgetown</u> Make turning radii improvements at S Michigan/S Bailey and E Marginal Way along Corson Ave for trucks through channelization improvements and minor ROW acquisitions <u>South Park</u> Improve the intersection of Dallas Ave S and 14th Ave S; signalize, re-channelize intersection, consider turning restrictions, and improve turning radii at intersection, time progressive movements in 14th Ave S corridor with bridge openings, and signals to the south.	<ul style="list-style-type: none"> • Improves local and regional freight and goods mobility for trucks. 	
East-West	Mobility and Circulation	General Access to Regional Facilities			
O and M	Local Circulation improve east west and north-south mobility for vehicles, freight, and goods movement.	GDPC 2: Upgrades to Airport Way. Reference Code: AD1-3 and G-7)	TSM measures to increase efficiency and traffic volume capacity on Airport Way. Most importantly, improvements are need to access Airport Way from 4 th Avenue S; significant enhancement to left turning movements from 4 th Avenue S onto Airport Way with signage is a key element to success of future use of the Airport Way corridor. Other TSM measure could include parking configuration/ management, shoulder improvements, channelization improvement: integrating traffic signals into railroad crossing signals system, coordinating/ interconnecting east-west traffic signals on major arterials such as Holgate, Lander, and Royal Brougham.	<ul style="list-style-type: none"> • Improves a corridor that is currently underutilized for both local and regional trips. • Would divert traffic from other congested corridors (I-5, 4th Ave, 6th Ave). • Supports Duwamish Coalition's recommendations for improving goods movement. • Provides an alternative corridor to 1st Avenue/4th Avenue between Georgetown and the North Duwamish/Seattle CBD. 	May displace some on-street parking capacity. Displacement should only be allowed where off-street parking is available.

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
East- West Mobility and General Access to Regional Facilities					
0 and M	Safety issues or high collision locations	GDPC 29, 30, 32, 60 : Review and evaluate vehicular and pedestrian safety at critical intersections and substandard streets within the M and I Center. (Reference Code: G-3, G5, G-2)	Conduct a detailed review along 4th Avenue S and 6 th Avenue South and evaluate access management, parking management and organization, channelization and other safety issues to address safety, access to/from 4th Avenue S and parking.	<ul style="list-style-type: none"> Provides direction to the City and local property owners to improve parking, access, and safety conditions along arterials and associated responsibilities. Provides input as to key pedestrian crossings of 4th Avenue S. * Improves safety of intersections. Adds additional awareness to other illegal parking activities in the general vicinity. Organized parking for employees and guests during peak periods. Improved safety for pedestrians. 	
0 and M	Local Access to Regional Transportation Facilities	At critical locations throughout the M and I Center, implement operational, minor capital, and safety measures to improve local accessibility to regional transportation facilities.	<ul style="list-style-type: none"> In North Duwamish subarea, convert existing protected left turn signals on major east-west arterials to protected plus permitted signals with flashing yellow to maintain mobility and access via Holgate and other major arterials onto 1st Avenue S, 4th Avenue S 8th Avenue S/Cloverdale Street intersection. Convert to fully actuated signal or semi-actuated during off-peak travel periods Cloverdale Street and SR 99 northbound on-ramp. Improve signage, lighting, turning radius, and acceleration length at this regional freeway access ramp. Intersection improvements to enhance capacity and operation of 16th Avenue S and E Marginal Way. Through intersection approach widening, signal improvements or other treatments, enhance intersection capacity and improve truck turning radii. Address improvements in conjunction with South Park Bridge (14th/16th Avenue S) preservation. S 96th Street from SR 509 to SR 99. Widen this street segment to truck/commercial street standards for cross-section, pavement structure, and drainage, accommodate for large turning movements to enhance truck route mobility in northern industrial area of South Park. 	<ul style="list-style-type: none"> Minimizes minor street delay through signal enhancements. * Improves safety, operation and visibility at this access ramp to the regional freeway system. Improves safety and access for commercial vehicles, employees and business traffic into South Park Industrial Area 3 via SR 99. Will require interjurisdiction coordination in many instances in the South Park subarea given existing boundaries of Seattle city limits, Tukwila city limits and unincorporated areas of Ring County. 	

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Advanced 0 and M	<i>Technology</i> Install Intelligent Transportation Systems and Real-Time Traveler Information for Major Through Corridors in Greater Duwamish	GDPC 54: Automated travel signs and VMS technology at key points in arterial and freeway system. (Reference Code: AD1-6, S-4, G-15)	<ul style="list-style-type: none"> • Install and link with the WSDOT VMS current systems to provide traveler information on alternative routes and possible delays to between the Alaskan Way viaduct and I-5 alternative freeway corridors • Interconnection of area traffic signals • Upgrading of traffic signal systems and controllers • Potential establishment of advanced warning and information control systems from railroad control centers for notification of long freight train movements, predicted arrival and duration of grade crossing closures. • Automated traffic signal systems that respond to traffic pattern fluctuations and closures of at-grade rail crossings, bridge raisings, and other occurrences • Improved system surveillance including CCTV, video detection and other detection sensors for traffic management purposes • Development of mechanisms to disseminate real-time traffic condition information • Joint industry/City program to educate area businesses, shippers, dispatchers, and drivers on how to use advanced traveler information to reduce overall traffic congestion. • Participation in the Washington State led effort to implement a commercial vehicle information system and network (CVISN) to improve the efficiency and effectiveness of commercial vehicle regulation and enforcement for both government and the trucking industry. 	<ul style="list-style-type: none"> • Provides travelers with delay information on regional route choices through Greater Duwamish. • Improves general mobility in the region. • Improved traffic control strategies will result in better traffic flow and increased freight mobility. • Real time information concerning traffic conditions will allow travelers, truck drivers, and dispatchers to make more informed routing decisions and thus reduce area congestion. • Cost savings to industry and shippers from reduced delays and regulatory efficiencies. 	<ul style="list-style-type: none"> • Provides travelers with delay information on routes through the Duwamish. • Improves general mobility in the region.
<i>parking M</i> 0 and M	<i>Management</i> Parking Management Plan in Vicinity of Stadiums and other Event Centers	GDPC 58: On Street Parking Management in the vicinity of special event facilities in cooperation with local businesses and property owners.	<ul style="list-style-type: none"> • The Committee supports initiating a new parking management plan for on-street in coordination with the Stadium plans and new exhibition center. • An inadequate parking supply, illegal and unsafe parking within public ROW creates conflicts on-street and off-street in the vicinity of the Seattle Design/Gift Center. Address the interaction between moving vehicles, parked vehicles, and pedestrians. 	<ul style="list-style-type: none"> • Reduces parking impacts to local business during typical day operation of the exhibition center and major event days at either the Seahawks or Mariners stadium. • Improved safety and access. • Organized parking for employees and guests during peak periods. • Improved safety for pedestrians that access parking for area businesses. 	

Table 4-1: Recommended Transportation Investments

Project Type/ ingik	Issues Addressed	Transportation Improvement	Description	Rationale	GDPC Comments
Transit and Passenger Rail Operations					
O and M	General Transit	GDPC 46, 47, 62 : Local Transit Service in M and I Center. (Reference Code: DCS-1, DCS-2, G-14, G-15)	Local transit service/operational improvements include: <ul style="list-style-type: none"> • Develop local circulation route to serve the north Duwamish area connecting the SODO, stadiums and Pioneer Square to regional transportation systems • Develop a fixed route or flexible circulator shuttle between M and I Center and the Beacon Hill neighborhood • Implement an employee shuttle from the future Boeing Access Intermodal terminal to the South Park industrial area • Implement use of smaller 25-foot shuttle buses to serve transit needs in South Park. • As part of 14th Avenue corridor urban accessibility treatments, provide a sheltered passenger transfer/waiting area for transit patrons, off-street parking amenities, and bus pullouts. 	Provides an opportunity to reduce commute, shopping, and travel related to major events in the northern Duwamish area.	
O and M	Enhance rail infrastructure to maintain efficient operation.	GDPC 25: Minimize conflicts between rail/roadway at S Lucile Street and Airport Way. (Reference Code: G-17)	Explore the feasibility of signals on Airport Way and 4 th Avenue South that alert vehicles when trains are blocking the Lucile Street crossing.	Allows for development of S Lucile Street as an alternative east-west corridor accessing I-5.	May affect local distribution/operations at Argo Yards or impact other rail users in the area.
Industrial/Business District Identifiers					
O and M	Support the Designation of District Identities and Route Signage to Local Business and Industrial Areas	GDPC 42, 56: Support the development of district/industrial/business activity centers within the M and I area through signage and/or urban design treatments for identification, circulatory routes, or parking areas. Implement signage on I-5, SR 99, SR 509, Alaskan Way Viaduct, Spokane Street Bridge, and other regional freeway systems for exit directions and on local arterials from the freeway ramps install directional signage in combination with the “district” identifiers. (Reference Code: G-10, G-12)	Sodo Business Center: <u>Design District in Georgetown :</u> Review and implement improvements consisting of sidewalk enhancements, marked crossing locations, signage, and other visibility enhancement for pedestrian circulation. Implement signage on I-5 for exit directions and on local arterials from the freeway ramps install directional signage in combination with the “district” identifiers. <u>South Park Industrial Districts:</u> Create an identity for local business and outside patrons to industrial businesses within South Park through directional signage and boundary identification of business/industrial districts. District areas include Riverside, Marine, Boulevard, Cloverdale, and Hillside.	Assists in local circulation between Design District and I-5 for in-frequent travelers to the area. Provides an identity to the district areas through boundary definition with signage on arterial roadways. Improves local truck route circulation within the M and I Center. Increase the visibility of pedestrian facilities and use. Improve safety of pedestrian circulation. Assists in local circulation between district areas and regional freeway systems for infrequent travelers to the area. Provides an identity to the district areas through boundary definition with signage on arterial roadways.	

Table 4-1: Recommended Transportation Investments

Project Type/ Ranking	Issues Addressed	Transport&ion Improvement	Description	Rationale	GDPC Comments
Nonmotorized Facilities					
O and M	improve nonmotorized facilities	GDPC 34, 36, 44: Identify improvements to bike facilities throughout the M and I Center that separate truck and vehicular traffic from bike travel. (Reference Code: AD1-11, CIP-5, G-21)	Replace the existing separated bike trail along East Marginal Way through construction of a new facility on the east side of this roadway. Complete West Marginal Way trail to West Seattle. Completion of the Sound-to-Mountain trail should be implemented in the Royal Brougham corridor only in conjunction with SR 519 Phase II.	<ul style="list-style-type: none"> The GDPC recommends that any bicycle facilities include stop or yield signs at major truck access points that give priority to trucks. Opportunity to improve safety for bicyclists through industrial area. Reduces potential for conflicts between nonmotorized and vehicular modes. 	Interaction of bicycles and trucks creates significant safety issues
O and M	pedestrian access and circulation in vicinity of special Event facilities	GDPC 33, 37, 38, 39, 41, 40, 43: Implement and prioritize pedestrian crossing treatments in the M and I Center to reduce or eliminate conflicts with vehicular traffic and goods mobility	Construct pedestrian improvements along Occidental Avenue, designate as pedestrian corridor for ballpark and stadium pedestrian traffic. Other crossing treatments include: <ul style="list-style-type: none"> New signal at S Fidalgo Street/4th Avenue S. Improved signage/pavement markings of existing crossing facilities. Pedestrian overpass over railroad tracks between Kingdome and 4th Avenue. Pedestrian overpass over railroad tracks between Mariners Ballpark and 4th Avenue. 	<ul style="list-style-type: none"> Provides a pedestrian-only corridor to accommodate major pedestrian flows during events. Increase the visibility of pedestrian facilities and use. Improve safety of pedestrian circulation. Separates pedestrian flow from heavy vehicular movements. Reduces delay of an at-grade crossing for both pedestrians and vehicles. 	SEATRAN's proposal to eliminate one northbound travel lane between Royal Brougham and SR 99 northbound on-ramp could potentially have significant impacts to operation of 1 st Avenue during peak periods and major events.
Transportation Needs in Transitional Areas					
O and M	Residential suffering.	GDPC 19: Implement traffic management measures in transitional residential/ industrial areas, and through improvements identified in truck circulation and local access to regional facilities, truck impacts would be significantly minimized in residential areas (Reference Code: G-12)	improve the safety and minimize truck impacts in residential areas immediately adjacent to industrial districts through traffic management treatments at the following locations: 8th Avenue S, north of Director Street to Cloverdale 8th Avenue S/9th Avenue S, south of Cloverdale Street to SR 99 Modify S Corson Avenue between S Michigan Street and E Marginal Way to provide buffer zone between the roadway and the residential neighborhood.		Current proposal on Corson Avenue does not appear to provide buffer zone for residents. It does not appear to provide any benefit to neighborhood. SEATRAN proposes to narrow lanes and restripe roadway to provide a buffer zone, but only along a portion of the road that is primarily industrial or undeveloped.

Utilities

Introduction

The Greater Duwamish M and I Center has been in industrial use since early this century, and has, due to changes in technology, experienced continuing need for public utility infrastructure which meets the needs of industrial and manufacturing processes.

Electrical and water utility needs in the M and I Center are currently being met. Electricity is a major operating expense for many industrial firms including manufacturers and companies engaged in processing and storage of food products, including seafood. At present, Seattle City Light industrial rates are below those of many major utilities and provide an important incentive for industrial firms to remain or relocate in the City.

There is, however, currently a lack of stormwater facilities on specific areas, especially in and around Georgetown and the South Park Industrial Area.

Provision of adequate and affordable infrastructure is crucial to the continued viability of the M and I Center, and like with electricity, can be an incentive for industrial firms to remain or locate in the area.

Goals and Policies

Goal UT 3: Provide adequate and affordable utilities sufficient to support growth in the M and I Center.

- Pol. UT 1.1** Public utilities, services, and infrastructure should be sufficient to accommodate projected growth.
- Pol. UT 1.2** Provide affordable high quality water for industrial use at an affordable price.
- Pol. UT 1.3** Maintain competitive electrical rates for industrial customers.
- Pol. UT 1.4** Provide adequate stormwater facilities in areas where deficiencies currently exist.
- Pol. UT 1.5** Increase roadway and pavement durability and longevity with drainage facilities and improved maintenance.

Recommended Actions/Strategies

- Act. UT-1** Reduce **Electrical Hookup Fees**. Reduce electrical hookup fees to make it easier for industrial companies to expand or locate in the City of Seattle.

Rationale: Lower hookup fees would encourage companies paying family-wage jobs to locate or expand within the M and I Center.
- Act. UT-2** Investigate Using Reclaimed Water. Investigate the feasibility of using reclaimed water for industrial processes.

Rationale: A study of the long-term cost effectiveness of applying reclaimed water to non-food production industrial uses is needed. The study should assess whether utilizing treated wastewater in appropriate industrial uses is less

expensive than providing potable water and indicate environmental benefits associated with the use of reclaimed water.

Act. UT-3 Provide Drainage Facilities. Provide the following specific drainage facilities in the M and I Center (which were identified in this planning process):

North Duwamish

- Horton between 4th Avenue S and East Marginal Way, Lander Street between 1st Avenue and 4th Avenue, rail crossings along the entire length of Holgate and on Occidental and Stacy, Occidental from Lander to Horton, the entire length of Spokane Street to Airport Way including rail crossings, and 6th Avenue S (shoulders) from Massachusetts to Lander.

Georgetown

- 4th Avenue S at S Michigan Street, 3rd Avenue S; between S Dawson Street and S Lucile Street, S Fidalgo Street; between 1st Avenue S and 4th Avenue S, and S Hudson Street at 1st Avenue S.

South Park

- AU streets bounded by 7th Ave S, SR 99, the Duwamish Waterway, and Southern Street.

Rationale: Drainage improvements will correct existing deficiencies which currently make it difficult to operate and attract new businesses. Better drainage would improve safety, structural integrity, and visual character of the roadway systems in M and I Center and would significantly increase the durability and life expectancy of paved structures through this district, therefore decreasing life cycle costs by reducing pavement rehabilitation needs.

Act. UT4 In-Depth Community Outreach Process. Conduct an in-depth community outreach process for SPU's South Park storm drainage study that takes direct input from property owners and operating businesses in order to effectively consider additional needs of the area not identified in Act. UT-3. This outreach process could be coordinated with the upcoming storm drainage and public utilities study identified below in Act. UT-5.

Rationale: Act. UT-3 identifies only the needs discovered in the course of this planning process. An in-depth community outreach process can help to effectively consider additional needs of the area not yet identified.

Act. UT-5 Coordinate Upcoming Storm Drainage and public Utility Study. Coordinate the upcoming storm drainage and public utility study between Seattle Public Utilities and King County to facilitate growth and development of the South Park/King County Manufacturing & Industrial Area. Ensure the following issues are analyzed and included in the study:

- Relationship of street and drainage functions,
- Costs to property owners/businesses,
- Strategies for future implementation, and
- Discussion of construction impacts.

Rationale: Coordinating upcoming studies will help to ensure consistency in planning efforts and assist in facilitating growth and development in the South Park/King County Manufacturing & Industrial Area.

Environmental Remediation

Introduction

Since the early 1900s, the Duwamish area has functioned as one of the principal employment centers for the City of Seattle and the region. The area saw losses in employment in the 1970s and 1980s with the decline of some local manufacturing industries, but it remains the largest industrial area in the State of Washington.

Despite the M and I Center's role as a major economic engine for the region, expansion opportunities for existing and new employers remains sluggish due in part to aging industrial facilities and infrastructure and contamination. Redevelopment of the Duwamish "brownfields," which are currently contaminated industrial sites awaiting cleanup, could result in the creation of additional industrial lands which would support additional family-wage jobs.

The nature of the existing or previous industrial uses, the types of contamination encountered, and the regulatory environment make cleanup of the M and I Center and the contaminated industrial areas very complex. Resting on landfill that covers tidal flats, environmental conditions in the M and I Center can be characterized by complicated groundwater issues and a variety of contaminants on small, individually held parcels. The Duwamish Waterway runs through the center of the area, and is important to the region both economically and ecologically. While manufacturers use the Waterway for transporting goods, salmon use it for spawning. Two Native American tribes—the Muckleshoot and the Suquamish—have fishing rights to the river.

Seattle's Duwamish area contains less than 1/2 percent of the County's land area, but contains over 20 percent of the hazardous waste sites regulated under the Model Toxics Control Act (MTCA) (City of Seattle OED). When compared with the Port of Seattle's Southwest Harbor project, (which spent \$45 million to clean up 180 acres) cleanup costs for the Duwamish corridor could be estimated in the hundreds of millions of dollars, if not more.

Many of the vacant, under-utilized, and contaminated sites in the Duwamish could be economically viable if remediation costs were more manageable. Anecdotal information suggests a high level of frustration on the part of property owners who wish to expand or locate in the Duwamish but cannot for reasons relating to contamination, cleanup costs, and/or parcel size.

Additional contamination problems may exist, but have not been documented by regulatory agencies. Movement of groundwater through the shallow aquifer is tide influenced, making the transfer of contaminants between properties more probable. According to industrial appraisers at the Ring County Department of Assessments, nearly 100 percent of the City's industrial land may be contaminated to one degree or another.

Solutions

The nature and extent of contamination in the M and I Center point to long term systemic solutions. While the degree of contamination and costs of cleanup seem daunting, combined political and community will has already moved toward implementing system-wide solutions. Fortunately, many agencies are already working cooperatively together to address environmental remediation.

In 1994 the King County Council established the Duwamish Coalition to study the area's industrial development issues and to devise a strategy that would promote broad policies that could be applied to the other industrial areas in the Seattle area. The Coalition has now handed off most of its recommendations to state and local agencies for implementation. The primary Duwamish Coalition recommendations fall into the following five categories:

- Job Creation Initiatives,
- Preserve and Reclaim Industrial Land,
- Water Quality and Habitat Enhancement,
- Regulatory Issues, and
- Infrastructure Investments.

To implement the Duwamish Coalition's recommendations, King County and the City of Seattle's strategy for brownfields redevelopment is to implement a number of systemic solutions which address regulatory and other institutional barriers to cleanup and redevelopment. In 1998 Vice President Al Gore and the USEPA designated the Duwamish Industrial Area as a Brownfield Showcase Community. The funds obtained through this project are being used to continue the work started by the Duwamish Coalition. A major task in the Showcase Community Project was the development of the Total Hydrocarbons Project (TPH), the intended outcome of which is to stimulate private investment by increasing the redevelopment potential of contaminated, vacant, or under-utilized industrial land.

In response to the above needs, King County, the City of Seattle, and other partners are implementing a broad range of additional innovative projects to address barriers to redevelopment, including changes to the statewide cleanup regulations (as part of the TPH project), a study of groundwater flow and contamination movement in the corridor (the Groundwater Pathways project, now completed), and the establishment of an Environmental Extension Service (EES) for small and medium-sized businesses in the corridor to assist in reducing pollution and cleaning up contaminated land. The EES (administered by ECOSS) assists businesses in finding solutions to regulatory, infrastructure, and development issues and problems, providing technical services in:

- Hazardous Materials Management,
- Environmental Files Management,
- Free Assistance from Northwest Environmental Business Council Environmental Consultants,
- Energy Conservation,

- Water Conservation,
- Stormwater Programs,
- Habitat Plantings,
- Recognition Programs, and
- Phyto/Bio-Remediation.

(Sources: King County-City of Seattle Brownfields Showcase Community Application II, 1997, "Lifting the Clouds, Seattle Clears the Way for Redevelopment," Brownfield News, February 1997, printed material regarding brownfields remediation provided by the City of Seattle Office of Economic Development).

Additionally, the City of Seattle provides financing to industrial businesses through the following programs:

- **Industrial Revenue Bonds (IRBs):** Issued by the City of Seattle Industrial Development Corporation (IDC), IRBs are available to manufacturing, processing, production, and assembly businesses. Industrial Revenue Bonds can help finance land purchase; building construction or improvement; purchase of machinery and equipment; architectural, engineering, and legal fees; and the cost of issuing and administering the bonds. Interest rates and terms are set by the bank or institution that agrees to buy the bonds. Interest rates may be floating or fixed. Because the bonds are issued by the City's IDC, a bond buyer is exempt from federal income taxes. This enables borrowing at a below-market interest rate. The rates on a floating rate IRB would be around 75% of prime. The rate on a fixed rate IRB would be approximately 2% below prevailing conventional interest rates.
- **Community Capital:** A nonprofit lender that provides technical assistance and loans to small businesses located in lower income neighborhoods and small manufacturers. Eligible loans include financing for start-up or a purchase of an existing business; purchase/refinance/construction of commercial real estate; accounts receivable financing for contractors; and restructuring long term debt and equipment and working capital.

Goals and Policies

Goal ER 1: Affirm the Duwamish Coalition Mission

Statement as the overarching principle and approach to environmental remediation:

"To preserve and reclaim industrial land for the purpose of expanding the manufacturing and industrial job base, and protecting and enhancing the natural environment."

*Goal ER 2: Affirm the goal of systemic reforms, to create the greatest incentive for **private** sector industrial activity.*

Recommended Actions/Strategies

- Act. ER-1 Continue to Fund Programs that Assist property and Business Owners. Continue to fund programs that assist property and business owners such as the Environmental Extension Service, Industrial Revenue Bonds, and Community Capital.
- Rationale: Due to prohibitive costs, continuing technical assistance is needed by small property and business owners to enable cleanup of contaminated properties.
- Act. ER-2 Complete and Implement Total Hydrocarbons Project. Complete and implement the Total Hydrocarbons Project.
- Rationale: The development and field testing of new environmental statewide regulations for assessing risk and setting cleanup standards for industrial lands with petroleum contamination will move the systemic solutions to remediation of contaminated lands forward towards implementation.
- Act. ER-3 Area-wide Consent Decrees. Complete and implement the Duwamish Area-wide Consent Decree model program.
- Rationale: Legal agreements called consent decrees that govern cleanup would greatly reduce the cost of obtaining individual consent decrees for cleanup of individual parcels.
- Act. ER-4 Public-Private Partnerships to Cleanup Industrial Sites. Form joint public-private partnerships with business, property owners, and government to identify ways to cleanup industrial sites using funds from existing and new programs.
- Rationale: Environmental clean up of industrial sites can be cost-prohibitive to some businesses. The formation of public-private partnerships to fund such programs can increase affordability of clean up and ensure that this extremely important function occurs.

Public Safety

Existing Public Safety Conditions

Police Protection Services in the Greater Duwamish

The Greater Duwamish Valley is served by the West and South Police Precincts, which both have large geographical areas. Efforts to form a West Seattle Precinct are welcomed among south end neighborhoods. Institution of this new precinct would vastly improve response times and overall police protection service for the South Precinct.

Crime Statistics in the Duwamish Area

- Traffic violations and traffic control stand out as the most frequent police incidents in the Greater Duwamish;
- 700 incidents of car prowling or auto accessory theft were reported in 1997. There is a high concentration of incidents along the 1st Avenue S corridor in the SODO Business District, the residential and old industrial core of Georgetown (southeast of Corson Avenue S), and on side streets north and south of Cloverdale Street in South Park;
- 560 incidents of theft were reported to the Police Department in 1997. Large concentrations occur along major arterials and in the residential pockets of South Park and Georgetown;
- 279 incidents fall under the category of vehicle theft; 127 as the recovery of stolen vehicles; and 63 as the theft and recovery of vehicles in the Greater Duwamish;
- The 372 incidents of nonresidential burglary are relatively small given the geographic size of the Greater Duwamish and in comparison to other business districts throughout Seattle;
- A total of 338 shoplifting incidents were reported in 1997;
- 330 incidents of property damage were reported in 1997. Of these, 23 were categorized as gang-related property damage. High concentrations of incidents exist in South Park along the Cloverdale Street corridor and its adjacent side streets;
- 313 assaults were reported to the police department in 1997;
- Prostitution incidents increased from the previous year to 32 incidents in 1997 and have dramatically increased over the past decade;
- 69 drug activity incidents were reported in 1997; and
- Of the 68 robberies reported in 1997, 38 were categorized as armed robberies, while the other 30 were considered strong arm robberies.

Historic Crime Statistics Trends — Part 1 Offenses

(Note: Part 1 Offenses are crimes under the jurisdiction of the FBI.)

- While the total number of crimes has decreased since 1994, incident reports have climbed gradually for the past three years;
- The SODO Business District experienced a sharp increase in the total number of Part 1 Offenses committed in 1997;



- There were substantial increases in aggravated assaults, burglaries, and auto theft. Robberies, thefts, and arsons went down during the past year;
- South Park has experienced an overall increase in crime between 1994 and 1997, rising from 338 Part 1 Offenses to 396; and
- Crime has steadily decreased in Georgetown during the period between 1994 through 1997.

Local Organizations Working on Public Safety.

Crime prevention and public safety stand out as joint priorities of the Greater Duwamish’s business and residential populations. In addition to the neighborhood planning groups in the Duwamish M and I Center, South Park, and Georgetown, several community-based organizations regularly work with the Seattle Police Department to address public safety concerns.

Fire Protection in the Greater Duwamish.

The Greater Duwamish Valley is served by four fire stations. As illustrated in Table 7-1, they are spread throughout the Greater Duwamish. Station 14 is within the SODO Business Association. Station 26 is in South Park. Station 27 is in Georgetown. Station 36 is situated on Harbor Island.

Station #	Location	Apparatus
14	32244th Ave S	Ladder Co., Aid Van Unit
26	800 So. Cloverdale	Engine Company
27	1000 So. Myrtle	Engine Company
36	3600 23rdAveSW	Rescue Unit, Engine Co.

Table 7-1: Greater Duwamish Fire Stations

Table 7-2 depicts the emergency response runs for each of the various companies and aid units serving the Greater Duwamish, as well as their average response times from dispatch to arrival on scenes.

Station #	Apparatus	Advanced Life support	Average Response Time (min)	Basic Life Support	Average Response Time (min)	Fire & Rescue	Average Response Time (min)	Total Responses
14	Ladder Co.	57	4.03	101	4.03	601	2.75	759
26	Engine Co.	195	4.66	285	4.92	193	5.41	673
27	Engine Co.	237	4.88	511	4.46	439	5.22	1,187
36	Rescue Unit	0	---	0	---	18	---	18
36	Engine Co.	163	4.61	316	4.71	438	5.34	917

Table 7-2: Greater Duwamish Fire Emergency Response Runs and Average Response Times
All information is current as of May 1, 1998.

Vision Statement

The Greater Duwamish will be a safe and comfortable place to work and live. As a shared interest among the local business associations and residential community councils, the Greater Duwamish will foster public safety and personal security as rallying points for the area's manufacturing and industrial businesses, and the residents of South Park and Georgetown. Community business and residential block watches will be in place and the Greater Duwamish will receive the necessary public investments to make streets safe, clean, and hospitable for all people. Community policing and fire protection services will be strong and visible, as more resources come to the Duwamish with the advent of a West Seattle Precinct.

Goal & Policies

The following section provides a listing of the proposed goals, policies, and strategies that will lead to a safe and secure Greater Duwamish. The recommendations fall into two priorities: (1) community-based actions which can be undertaken by local crime prevention organizations, and (2) 'public safety capital improvements that will be necessary from the City of Seattle.

Goal PS-1: Create an Educational Outreach Program.

Create a unified and cohesive network that links together the crime prevention resources and capabilities of the Greater Duwamish business and residential communities.

- Pol. PS 1.1 Promote public safety as an important element that will ensure economic vitality in the Greater Duwamish's business communities and outstanding quality of life in its residential neighborhoods.
- Pol. PS 1.2 Establish partnerships among local organizations to strengthen awareness and action relating to public safety and community policing.
- Pol. PS 1.3 Enhance educational public safety programs and continue to develop working relationships with the Seattle Police Department's Community Crime Prevention Team.

Goal PS-2: Create Safe Communities with Public Safety Capital Improvements.

Improve public investments in community policing, wayfinding, street lighting, and traffic control to strengthen with safe streets, vital and economically strong business districts, and livable residential enclaves in the Duwamish M and I Center.

- Pol. PS 2.1 Promote community policing as a strategy for creating safer streets and increasing personal safety throughout the Greater Duwamish.
- Pol.** PS 2.2 Establish identity and wayfinding features to increase pride of place and promoting a stronger sense of community in business districts and residential neighborhoods.

- Pol. PS 2.3** Resolve traffic conflicts and support recommendations for local traffic improvements as proposed by the Greater Duwamish Manufacturing and Industrial Center Plan.
- Pol. PS 2.4** Address local public safety hotspots in the SODO Business District, South Park, and Georgetown, as identified in the existing conditions segment of this Public Safety Plan, as well as in future findings from the proposed Public Safety forums.

Recommended Actions/Strategies

Create an Educational Outreach Program

- Act. PS-1** Educational Outreach Program. Seek funding for an Education Outreach Campaign to Greater Duwamish businesses in the SODO Business District, South Park, and Georgetown, which would include the following actions:
 - A) Conduct a mass mailing in 1999 to all Greater Duwamish businesses;
 - B) Coordinate with each local business association;
 - C) Provide public safety information briefings to business associations;
 - D) Develop a newsletter to update businesses on public safety happenings;
 - E) Publish newsletter half yearly, then move up to quarterly in 2000; and
 - F) Develop a Greater Duwamish Public Safety web site.

Rationale: An education and outreach campaign is needed to apprise the community about issues, and to garner community support and involvement on an ongoing basis.
- Act. PS-2** Establish a **Greater** Duwamish Public Safety **Advisory** Committee. Seek funding for staffing and professional services assistance. The committee should include:
 - A) Seattle Police and Fire Chiefs as Honorary Chairs,
 - B) Representative from the Seattle Mayor's Office,
 - C) Chairs from the SODO, South Park, and Georgetown Business Associations,
 - D) Representatives from South Park and Georgetown Crime Prevention councils,
 - E) Members from Seattle Police Department Community Crime Prevention,
 - F) Representative from King County Metro Transit,
 - G) Representative from the Tukwila Police Department,
 - H) Representative from the Port of Seattle Police,
 - I) Representative from the United States Coast Guard,
 - J) Representative from Ring County International Airport Security,

- K) Captains from the Greater Duwamish Fire Stations,
 - L) Member from the Seattle Neighborhood Group, and
 - M) At-large members from the local business associations.
- Rationale: A public safety advisory committee is needed to ensure that public safety efforts will be provided with continuity on an ongoing basis.

Act. PS-3 Public Safety Forums. Host a series of Public Safety forums. Seek funding for four initial events, one in each of the business areas and one that focuses on area-wide issues. Steps to begin the forums would include:

- A) Establish a calendar of events;
- B) Develop mailer pieces;
- C) Secure meeting rooms in each local business district;
- D) Work with Seattle Police to establish agenda and forum content; and
- E) Develop and mail a follow-up newsletter on forum findings.

Rationale: Public safety forums, when combined with actions PS-1 and PS-2, will ensure ongoing community awareness and involvement in community policy and public safety support.

Create Safe Communities with Public Safety Capital Improvements

Act. PS-4 Create a West Seattle Precinct.

Rationale: Because no precinct exists in this part of the City, the South Seattle precinct service area is spread widely. A West Seattle precinct would improve patrols and response times throughout the Greater Duwamish by limiting the coverage area of the South Seattle precinct

Act. PS-5 Establish Community Policing Storefronts. Work with Seattle Police to establish local community policing storefronts in each of the area business districts, including:

- A) A SODO storefront perhaps co-located with Seattle School District;
- B) A South Park storefront along 14th Avenue S to target **hotspots** on this street and nearby Cloverdale Street; and
- C) A Georgetown storefront either in the old commercial core (perhaps as part of Old City Hall renovation) or located in or around Seattle Design Center.

Rationale: Community policing storefronts increase public access to police officers and help in the exchange of safety information between the public and the police.

Act. PS-6 Establish a **Wayfinding** System. Establish a “wayfinding” system throughout the Greater Duwamish Valley. Elements which should be included:

- A) A network of large, visible directional signs,

- B) Traffic and highway signage,
- C) Gateway and welcoming signs/banners to denote various districts,
- D) Kiosks and bulletin boards to assist patrons, and
- E) Information Centers, perhaps co-located with community policing storefronts.

Rationale: This endeavor is currently underway for Downtown Seattle, and could be implemented to better connect people to the various business districts, industrial centers, community facilities, and residential neighborhoods in the Greater Duwamish.

Act. PS-7 **Traffic** Control and Directional Mechanisms. Support traffic control and traffic directing mechanisms promoted in the 'Greater Duwamish Valley, as suggested in the Duwamish Manufacturing & Industrial Center Plan.

Rationale: Increased traffic control and directional mechanisms would help improve traffic safety in the M and I Center.

Act. PS-8 Improve Street Lighting. Work with Seattle City Light to identify areas within the business districts that require improved street lighting. Areas which should be closely examined for new capital improvements are:

- A) South Park: 14th Avenue S, Cloverdale Street, and along the arterial route established through the northern segment of the South Park Industrial area,
- B) South Park: Work with homeowners on alley lighting and installing new lighting on troubled side streets intersecting with Cloverdale;
- C) Georgetown: Provide for overall lighting improvement in and around the old commercial core;
- D) Georgetown: Work with homeowners on alley lighting, and install improved lighting along East Marginal Way S on "motel row;"
- E) SODO Business District: Provide for new and improved illumination of street lighting on all major east-west streets north of Spokane Street. Should a light rail station be developed at the Metro Busway and Lander Street, provide enhanced pedestrian lighting from Airport Way S to 1st Avenue S; and
- F) In all areas, work with King County Metro to improve lighting around bus stops, particular routes along Airport Way S, 4th Avenue S, the old commercial core in Georgetown, and 14th Avenue S and Cloverdale Street in South Park.

Rationale: Many streets in the M and I Center lack adequate lighting, which creates the impression of being deserted at night. Improved lighting will assist with community policing and increased visibility in the M and I Center.

Act. PS-9 Fire Department Resources. Retain all of the available Fire Department resources at each of the station locations. Ensure that Station 14 retains both its ladder company and aid unit.

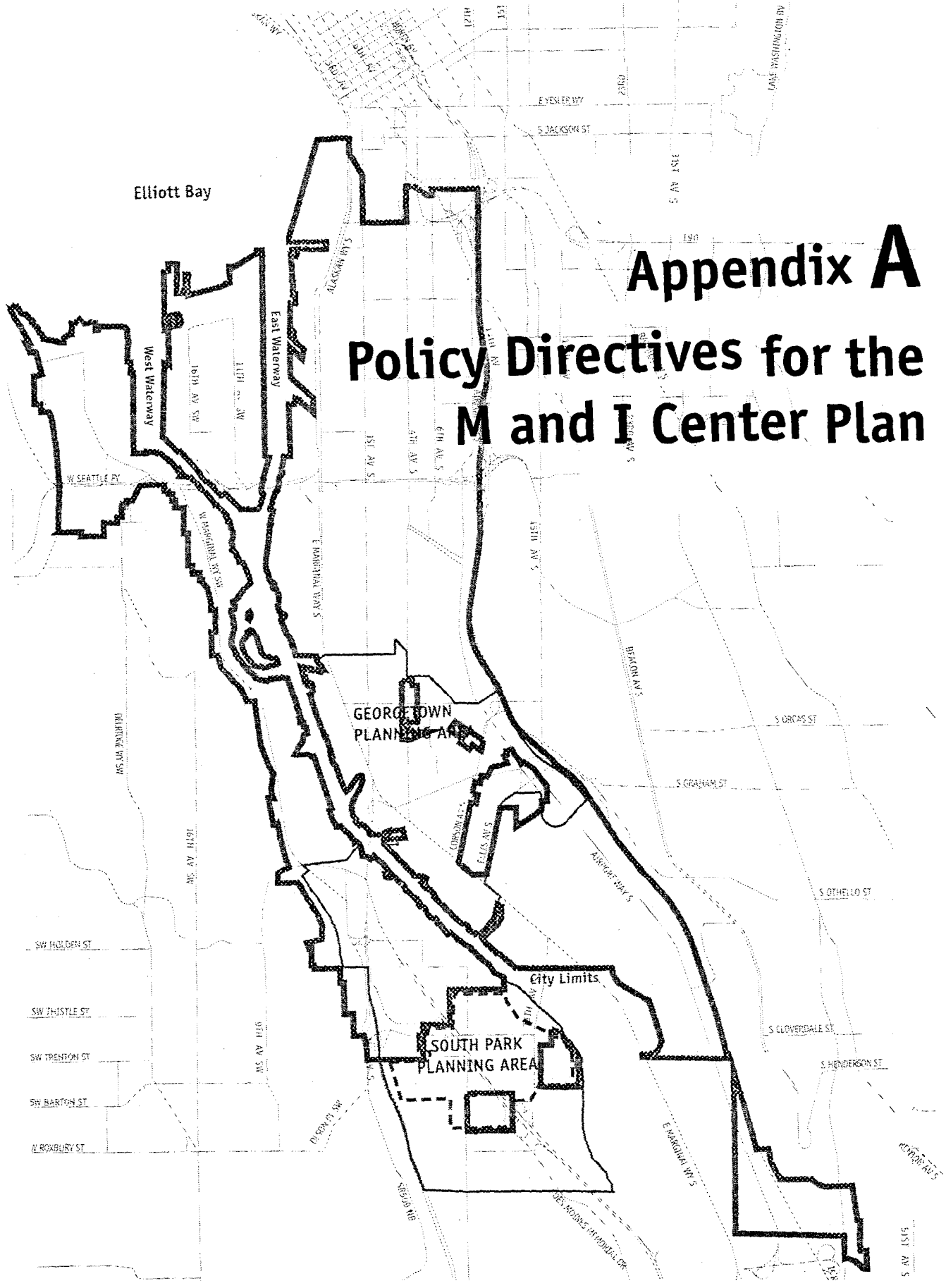
Rationale: The removal of the aid unit would cause great risk of increased response time for aid type emergencies in the Greater Duwamish Manufacturing and Industrial Center.

Summary Matrix Of Proposed Public Safety Strategies

The following matrix summarizes the proposed public safety strategies described in the previous section. The matrix provides a document reference, brief description of the proposed improvement, a timeframe, an estimated cost, and an indication of which City Departments should respond for future implementation.

Table 7-3: Recommended Public Safety Actions

Ref.	Description	Tim&me	Cost Estimate	Implementor
Act. PS-1	Funding for Education Outreach Campaign, including mailers, newsletters, briefings, web site.	In 1999	\$50,000	<ul style="list-style-type: none"> Community Groups Dept. of Neighborhoods
Act. PS-2	Establish Greater Duwamish Public Safety Advisory Committee. Seek funding for staffing and professional services.	Begin in early 1999	\$25,000 (staffing half-time)	<ul style="list-style-type: none"> Community Groups Dept. of Neighborhoods Seattle Police Seattle Fire Department
Act. PS-3	Host Public Safety Forums in each of the three local districts and host one area-wide. Work will include mailers, calendar prep, agenda development, and creation of a follow-up mailer on the forum findings.	1 st or 2 nd Quarter of 1999	Partially funded today. \$12,000 for mailers. \$10,000 for organizing.	<ul style="list-style-type: none"> Community Groups Dept. of Neighborhoods Seattle Police Seattle Fire Department
Act. PS-4	Support development of a West Seattle Police Precinct.	ASAP		<ul style="list-style-type: none"> Mayor's Office City Council Seattle Police
Act. PS-5	Establish local community policing storefronts in each of the area business districts. It is assumed community must find and help secure location funding.	1 to 3 years	Costs vary.	<ul style="list-style-type: none"> Seattle Police Business Associations Residential Councils
Act. PS-6	Establish wayfinding systems throughout the Greater Duwamish Valley. Model after Downtown Seattle efforts.	1 to 5 years	\$25,000-30,000 for signage \$30,000/year for info centers	<ul style="list-style-type: none"> Community Groups Dept. of Neighborhoods SeaTran Washington DOT
Act. PS-7	Support traffic control and traffic directing mechanisms.	2 to 10 years	--	Please refer to the Greater Duwamish Transportation Element.
Act PS-8	Provide a range of street, alley, and bus stop lighting investments through the Greater Duwamish.	1 to 5 years	Costs vary.	<ul style="list-style-type: none"> Seattle City Light King County Metro
Act PS-9	Retain Aid Unit for Station 14.	ASAP	--	<ul style="list-style-type: none"> Seattle City Council Seattle Fire Department



Appendix A

Policy Directives for the M and I Center Plan

Policy Directives for the M and I Center Plan

The Greater Duwamish Manufacturing Center was designated as such in the adopted county-wide planning policies and the Seattle Comprehensive Plan as part of the Growth Management Planning process. The policies and criteria for their implementation have guided the development of the M and I Center Plan.

County- Wide Planning Policies

The County-Wide Planning Policies were adopted by Ring County jurisdictions, as mandated by the State Growth Management Act. They became effective when they were ratified by ordinance or resolution by at least 30 percent of the city and county governments representing 70 percent of the population of Ring County according to interlocal agreement.

The County-Wide Planning Policies identify Urban and Manufacturing/Industrial Centers (M/I Centers), stating that:

“Manufacturing/industrial **Employment** Centers are key components **of the** regional economy. These areas are characterized by a **significant** amount of manufacturing, industrial, and advanced technology employment. They **differ from** other employment areas, such as Business/O&e parks in that a land base and the segregation of major non-manufacturing uses are essential elements of their operation.”

Within the Urban Growth Area, the County-Wide Planning Policies shall assure the creation of a number of locally determined Manufacturing/Industrial Centers which meet specific criteria. The Manufacturing/Industrial Centers shall be characterized by the following:

- Clearly defined geographic boundaries,
- Intensity/density of land uses sufficient to support manufacturing, industrial, and advanced technology uses,
- Reasonable access to the regional highway, rail, air, and/or waterway system for the movement of goods,
- Provisions to discourage large office and retail development, and
- Fast track permitting.

Local Manufacturing/Industrial Centers were determined through a joint local and county-wide adoption process based upon specific criteria. Each jurisdiction then adopted its definition of an M/I Center which specifies the exact geographic boundaries of the centers. Jurisdictions are required to have zoning and detailed plans in place to achieve the following goals by 2010:

- Preserve and encourage the aggregation of vacant or non-manufacturing/industrial land parcels for manufacturing uses;
- Discourage land uses which are not compatible with manufacturing, industrial, and advanced technology uses;
- Accommodate a minimum of 10,000 new industrial, family-wage jobs; and

- Limit the size of offices and retail development that is not ancillary to an M and I operation.

Seattle Comprehensive Plan

The Seattle Comprehensive Plan (adopted 1994) implements the County-Wide Planning Policies with its goals and policies that identify and support its two M and I Centers. Comprehensive Plan policies are summarized below:

Manufacturing and Industrial Centers

(Goal G1) Ensure that adequate accessible industrial land is available to promote a diversified employment base and sustain Seattle's contribution to the regional high-wage job growth.

(Goal 31) Distribute the 131,400-146,000 jobs called for in this plan among the various areas of the City as follows:

- Urban Centers 65 percent of job growth,
- M/I Centers 10 percent of job growth (13,140-14,660 jobs),
- Urban Villages 15 percent of job growth.

(Goal 34) Achieve the following 20 year employment targets in M/I Centers:

- North Seattle M/I Center: 3,800 jobs,
- Duwamish M/I Center: 10,860 jobs.

Goals for Land Use Regulation

(G60) Promote high-value-added economic development and support growth in the industrial and manufacturing employment base.

(G61) Preserve industrial land for industrial use and protect viable marine and rail-related industries from uses competing for scarce resources.

(G62) Allow existing businesses to expand, stabilize existing industrial areas, and encourage the siting of new businesses which are supportive of the goals for industrial areas.

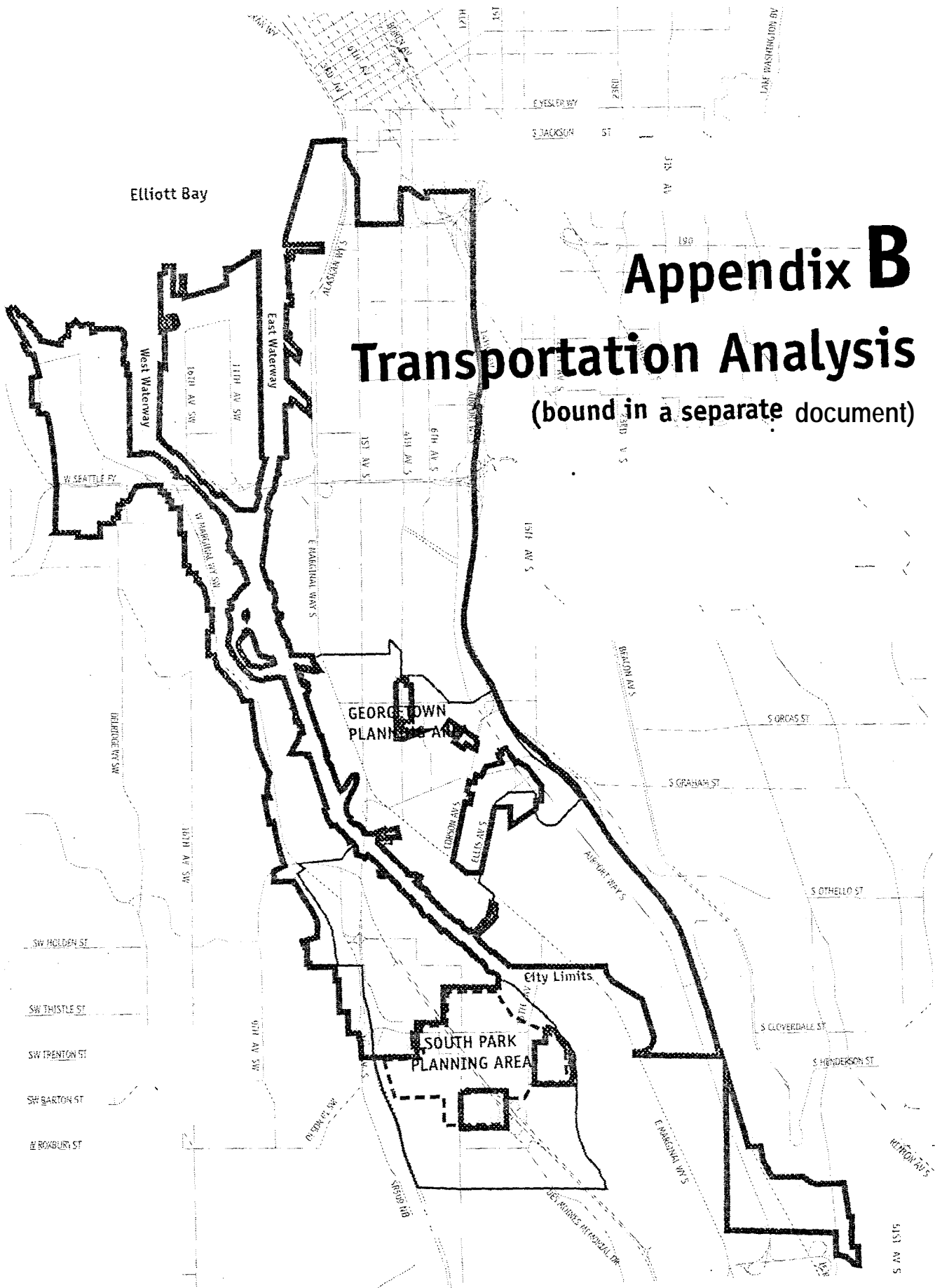
(G63) Prevent incompatible activities from locating in close proximity to each other, while accommodating a mix of compatible employment activities in areas of diversified uses.

Policies

L25 Promote manufacturing and industrial use growth including manufacturing uses, advanced technology industries, and a wide range of industrial-related commercial functions, such as warehouse and distribution activities in M/I Centers.

L26 Strive to expand existing manufacturing and industrial activity. Particular emphasis shall be given to maintaining industrial land that is uniquely accessible to water, rail, and regional highways for continued industrial use.

- L27 Limit in industrial/manufacturing areas commercial or residential uses that are unrelated to the industrial function, that occur at the intensities posing short- and long- term conflicts for industrial uses, or that threaten to convert significant amounts of industrial land to non-industrial uses. Establish new size of use limits for retail uses in the Industrial Commercial zone.
- L28 Establish M/I Centers consistent with the Countywide Planning policies (identified above).
- L29 Designate the following locations as M/I Centers: 1) North Seattle M/I Center (BINMIC) and 2) Duwamish M/I Center.
- L30 Designate industrial development emphasis areas within M/I Centers where special emphasis is warranted to promote industrial development.
- L31 Work with property owners and the affected community to establish public and private strategies to enhance conditions for industrial activity and redevelopment in industrial development emphasis areas.
- L113 Include among industrial zones the IG1, IG2, IB, IC, and M/I Center Overlay to accommodate a range of industrial characters and mixes of industrial and commercial uses.
- L113 Designate industrial areas on the attached Future Land Use Map where:
- The primary function is industrial activity, including industrial uses, advanced technology industries and a wide range of industrial-related commercial functions, such as warehouse and distribution activities:
 - The basic infrastructure needed to support industrial uses already exists;
 - Areas are large enough to allow the full range of industrial activities to function successfully:
 - There is either sufficient separation or special conditions that reduce the potential for conflicts with development in adjacent, less-intensive areas.
- L115 Include among appropriate activities manufacturing uses, advanced technology industries, and wide range of industrial-related commercial functions, such as warehouse and distribution activities. Of the highest priority are high value-added, high-wage industrial activities.
- L116 Permit commercial uses in industrial areas to the extent that they reinforce the industrial character, and limit specified non-industrial uses, including office and retail development, in order to preserve these areas for industrial development.
- L117 Generally do not permit new residential uses in industrial areas.
- L118 Restrict to appropriate locations within industrial areas those industrial uses which, by the nature of materials involved or processes employed, have a potential of being dangerous or very noxious.



Appendix B

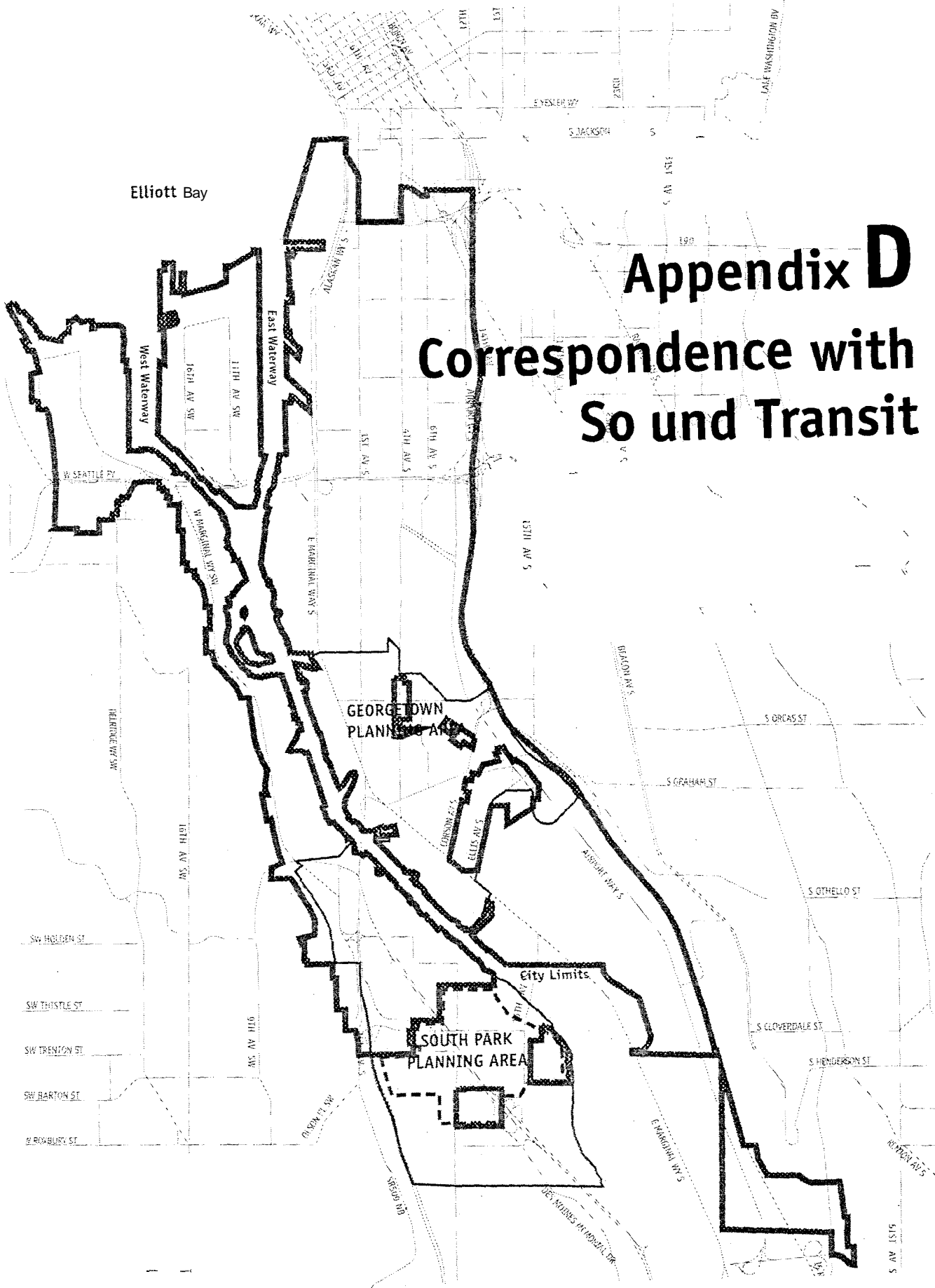
Transportation Analysis

(bound in a separate document)

Appendix D

Correspondence with

So und Transit





**GREATER DUWAMISH
PLANNING COMMITTEE**

BE: E.I.S comments on Sound Transit segment alternative C-1

February 5th, 1999

Michael Williams
Central Corridor Project Manager
Sound Transit
1100 Second Avenue
Seattle, WA 98101

Dear Mike:

The Duwamish Manufacturing and Industrial center is a major economic engine for Seattle, King County and the entire Pacific Northwest region. With 3,600 businesses employing more than 72,000 workers, the Duwamish generates 26% of King County's tax revenues, a disproportionate percentage of B and O taxes and the largest family wage job base in the region. For the past three years the Greater Duwamish Planning Committee and its consultants have been developing a Manufacturing and Industrial Center plan which recommends transportation, land use, zoning and economic policies for this area for the next fifteen years. The Duwamish also contains regional transportation links vital to the distribution of freight, rail and intermodal traffic. These critical connections must be preserved and enhanced to insure the future viability of the M and I center.

The GDPC transportation sub committee met with representatives of Sound Transit on several occasions during the past year. At those meetings we made numerous proposals and suggestions regarding the Duwamish segment of the overall Sound Transit plan. It appears that very few if any of those proposals were incorporated into the final draft or even given reasonable consideration. As a result, we have serious concerns regarding the current configuration proposed by Sound Transit.

The Duwamish M and I center plan establishes both Lander Street and Airport Way as principal arterials critical to freight mobility and commercial traffic. Sixth Avenue South is also a major truck and freight distribution route to and from the I-5 access ramps at Spokane street. The sound transit plan significantly impacts these critical routes. We have serious concerns regarding the details of the Lander Street to E3 bus way segment in particular. We were only recently informed that access to BNSF railroad spur tracks would be drastically reduced to accommodate transit patterns. This reduced rail access impacts the viability of several large industrial business and distribution facilities north of Lander Street. We were also surprised to note that your plan seriously reduces access to and from local businesses, particularly south of Lander Street, These details were not provided in our earlier discussions.

While a new transit station along the E3 bus way may provide some benefits to the M and I center, they may be outweighed by negative impacts of the project on freight mobility, local businesses and primary arterial connections. If this route is chosen, it is imperative that the street level design and mitigation be designed to protect vital **arterials**, freight and rail mobility and access to local businesses.

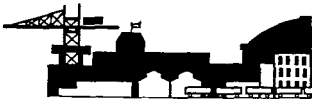
AS we evaluated the overall impacts of the Sound Transit plan, the proposed maintenance base north of Lander Street generated the most significant negative impacts to the M and I Center. Location of a maintenance base in this area directly conflicts with many of the M and I Center goals and proposed policies. It destabilizes an active area of the M and I center, generates substantial impacts to the remaining businesses and threatens to require the acquisition of additional industrial land for future expansion of the base. Our Committee remains vehemently opposed to any further consideration of this site.

We have also been informed that the Lander Street route may require the acquisition and demolition of the Water department facility on Airport Way. The relocation of this operation would represent a substantial expenditure to the taxpayers and drastically increase the estimated costs. Such increased expenditures may also undermine the argument for the cost benefits of this route delineated in your letter of February 1st 1999 addressed to our committee.

Please do not hesitate to contact me should you have any questions or require further information on the GDPC positions related to Sound transit.

Sincere regards,

David Huchthausen
Co-Chair



**GREATER DUWAMISH
PLANNING COMMITTEE**

RE: Additional E.I.S comments on Sound Transit segment alternative C-1

February 22nd, 1999

Michael Williams
Central Corridor Project Manager
Sound Transit
1100 Second Avenue
Seattle, WA 98101

Dear Mike:

After further review of the C-1 routing alternative linking a Beacon Hill tunnel to the E-3 Busway via Lander Street, our committee has determined that the current design represents a devastating and unacceptable impact on the Duwamish Manufacturing and Industrial Center. The GDPC and its consultants have spent the last three years developing a Manufacturing and Industrial Center plan which recommends transportation, land use, zoning and economic policies for this area for the next fifteen years. The routing and design for C-1 directly conflict with many of our transportation and freight mobility priorities, as well as primary goals and policies intended to stabilize Seattle's diminishing industrial land base. Although our transportation sub committee met with representatives of Sound Transit on numerous occasions over the past year, we were never informed of the necessity to restrict or eliminate access to the BNSF spur tracks serving businesses north of Lander street, nor were we informed of the intent to restrict access to businesses south of Lander Street. Quite the contrary, we were continually told that this route would have minimal impact on the Lander Street corridor. In light of these developments, the GDPC stands in opposition to C-1 unless these impacts are satisfactorily mitigated.

The Duwamish M and I Center Plan establishes both Lander Street and Airport Way as principal arterials critical to freight mobility and commercial traffic. Sixth Avenue South is also a major truck and freight distribution route to and from the I-5 access ramps at Spokane street. Maintaining rail spur line access to businesses throughout the Duwamish is another a key component of the plan. The design of C-1 significantly impacts all of these critical routes. During our meetings with Sound Transit we suggested the option of elevating the Lander street section of the C-1 route. This would effectively mitigate most of the impacts delineated above. While it may increase the initial cost of the C-1 segment, it would preserve a vital manufacturing and industrial employment base for the long term and reduce conflicts with freight mobility and industrial land use priorities. We believe that an independent engineering evaluation of this proposal is required.

As we stated earlier, the Duwamish M and I center has 3,600 businesses employing more than 72,000 workers: it generates 26% of King County's tax revenues, a disproportionate percentage of B and O taxes and provides the largest family wage job base in the region. The Duwamish also contains regional transportation links vital to the distribution of freight, rail and intermodal traffic. This valuable employment base and its critical freight mobility connections must be preserved and enhanced to insure the future viability of the M and I center.

Although the SODO Business Association previously endorsed the C-1 route, they did so without detailed knowledge of these impacts. The Executive Committee is currently reevaluating it's position and will be drafting a separate response. Please do not hesitate to contact me should you have any questions or require further information on the GDPC positions related to Sound Transit.

Sincere regards,

David Huchthausen
Co-Chair

CC:	Paul Shell	Mayor of the City of Seattle
	Ron Sims	King County Executive
	Greg Nickels	Ring County Council
	Richard McGiver	Seattle City Council
	Richard Conlin	Seattle City Council
	Jan Drago	Seattle City Council
	Steve Pearce	Strategic Planning Office
	Ben Walters	Office of Economic Development