

# **ST. JOHNS TRUCK STRATEGY**

**COLUMBIA CORRIDOR TRANSPORTATION STUDY**

## **REPORT AND RECOMMENDATION**



**MAY 2001**  
**CITY OF PORTLAND**  
**OFFICE OF TRANSPORTATION**

## **PORTLAND OFFICE OF TRANSPORTATION**

Charlie Hales, Commissioner

Victor F. Rhodes, Director, Office of Transportation

Steve Dotterer, Program Manager, Planning Division

### **PROJECT MANAGER**

Steve Gerber

### **PROJECT STAFF**

Richard Bellinger, Graphics

Samy Fouts, Graphics

Ken Lindmark, Senior Transportation Planner

Ningsheng Zhou, Transportation Planner

### **CONSULTANT**

Ann Sylvester, Parametrix

# **ST. JOHNS TRUCK STRATEGY**

**COLUMBIA CORRIDOR TRANSPORTATION STUDY**

## **REPORT AND RECOMMENDATION**





## **JOINT CITIZENS AND TECHNICAL ADVISORY COMMITTEE**

Ron Hernandez/Co-Chair/At Large Citizen and North Portland Transportation Committee  
Wayne Plaster/Northwest Container Services, Inc.

Donna Babbitt/Friends of Cathedral Park  
Scott Batson/Portland Office of Transportation

Leonard Chambers/University Park Neighborhood Association

John Gray/Metro

Brett Kesterson/Portland Office of Transportation

John Lawrence/Green Transfer and Storage

Larry McCord/St. Johns Business Boosters

Jane McFarland/Port of Portland

Larry Olson/Oregon Department of Transportation

Ray Piltz/St. Johns Neighborhood Association

Bill Rabiega/At Large Citizen

Terri Ratliff/At Large Citizen

Doug Walters/T&G Trucking

John Yazzolino/Matlack, Inc.



# TABLE OF CONTENTS

## EXECUTIVE SUMMARY AND RECOMMENDATION

Introduction .....	1
Recommendation of the Advisory Committee .....	2
Study Purpose .....	4
Study Process .....	4
Preliminary Evaluation .....	5
General Findings and Conclusions .....	7
Summary of Benefits and Impacts .....	11

## CHAPTER ONE: INTRODUCTION

Why Study the Columbia Corridor and the North Portland Peninsula .....	15
--	----

## CHAPTER TWO: EXISTING CONDITIONS

Area Character .....	17
Land Use .....	17
Transportation Network Characteristics .....	19
Truck Characteristics .....	21

## CHAPTER THREE: ALTERNATIVES

Long Range Alternatives .....	23
Short-Term Alternatives .....	25

## CHAPTER FOUR: RECOMMENDATIONS

Transportation Improvement Program .....	31
Administrative Recommendations .....	36

## CHAPTER FIVE: CITIZEN INVOLVEMENT

Summary .....	43
Background/City Council Mandate .....	44
Advisory Committee .....	44
Open Houses/Information Fair .....	45
Notification .....	46
Neighborhood and Interested Parties, Outreach .....	47
Coordination with Affected Jurisdictions .....	47

## CHAPTER SIX: POLICY ASSESSMENT

City Transportation Goals and Policies .....	49
Other Applicable City Goals and Policies .....	56
Regional (Metro) Transportation Plan Requirements .....	57
Oregon Revised Statutes, Transportation Planning Rule .....	61

## LIST OF FIGURES

1. Recommended Projects Map .....	14
2. Study Area .....	15
3. Area Character and Land Use .....	18
4. Transportation Network Characteristics .....	20
5. Long Range Options .....	24
6. Universe of Alternatives .....	29
7. TC/S No. 1 (Traffic Calming/Safety) .....	32
8. TC/S No. 2 .....	32
9. TC/S No. 3 .....	32
10. TC/S No. 4 .....	33
11. TSI No. 1 (Truck Street Improvement) .....	34
12. TSI No. 2 .....	34
13. TSI No. 3 .....	35
14. TSI No. 4 .....	35
15. Designated Truck Streets .....	42
16. Reroute of US 30 Bypass .....	55
17. Truck Route Segment Improvements .....	60

## LIST OF TABLES

1. Cost Estimates, Traffic Calming/Safety .....	33
2. Cost Estimates, Truck Street Improvements .....	36
3. The Gross Vehicle Weight of Some Potentially Affected Vehicles, for Comparison Purposes Only .....	37



## **INTRODUCTION**

This *Executive Summary* contains a summary of the study purpose, process and findings from the St. Johns Truck Strategy (SJTS) and the recommendation of the SJTS Advisory Committee (AC) appointed to help direct the study. The *Executive Summary* includes the *Recommendation of the Advisory Committee*, presented first, followed by sections on *Study Purpose, Study Process, Preliminary Evaluation, General Findings and Conclusions*, and *Summary of Benefits and Impacts*. A brief description of the content of each of these sections follows.

The *Recommendation of the Advisory Committee* relates the AC's majority conclusions and their recommendation to the City Council. The representatives of the St. Johns Neighborhood Association and the Friends of Cathedral Park have stated that they will prepare a minority report, which will be forwarded to the City Council under separate cover.

The *Study Purpose* describes the background, intent and objectives of the study as derived from previous actions (Columbia Corridor Transportation Study), City Council mandate and the AC. Maps of the originally identified issues and potential solution are attached.

The *Study Process* section provides a general description of the manner in which the study and the AC was composed, managed and conducted, including the selection of alternatives.

The *Preliminary Evaluation* includes a list of the original 47 project, program, and policy alternatives compiled by the AC, and the evolution of those alternatives to the list of final alternatives.

The *General Findings and Conclusions* relates the AC's fundamental findings and assessment of the final alternatives, including a brief description of each of the final project alternatives, and the policy, study, and program alternatives.

The *Summary of Benefits and Impacts* identifies the positive and negative features of the final recommendation selected by the AC. A list of technical memoranda and other documents prepared for this study provide a background for the AC's deliberations.

A map of the final transportation improvements developed by the AC is attached. The program, policy and project alternatives were derived from the application of various screening and evaluation criteria to the original alternatives, as described in the *Study Process* section of the *Executive Summary*.

## RECOMMENDATION OF THE ADVISORY COMMITTEE

The charge of the AC was two-fold:

1. Identify ways in which truck circulation can be improved between the St. Johns Bridge, Rivergate and I-5
2. Determine how non-local truck traffic can be eliminated or reduced on residential and retail commercial streets

The parameters of this charge, as established by the City Council, includes:

1. Utilize the existing local and regional street system;
2. Be a short-term (2-5 year) solution;
3. Not include more than \$10 million in solutions;
4. Coordinate with other North Portland projects; and
5. Carefully analyze solutions so as to not shift a problem to a different location

The AC has identified the above charge as appropriate to an interim or short-term improvement or action only. A solution to the problem will need to eliminate through truck movements from the St. Johns retail core and Pedestrian District. This action was identified as paramount to the livability, economics and safety of the area. However, the majority of the AC has recognized that elimination of trucks from the St. Johns retail core area falls outside the scope of this study. In recognition of the importance of a long-range solution, a recommendation for removing the trucks from the St. Johns core area has been forwarded to Metro. This recommendation encourages and promotes the acceleration and prioritization of a listed Regional Transportation Plan feasibility study for a new bridge crossing the Willamette River from the north Portland peninsula to US 30 and the northwest industrial districts.

In terms of short-term improvements, the majority of the AC has recommended a combination of actions falling into two categories, transportation improvements and administrative actions, which includes two regulatory actions, three operational directives, and one policy.

### Transportation Improvements

The first category, transportation improvements, is broken down into two types of improvement. The first provides for mitigation of truck impacts, neighborhood livability and safety for pedestrians and bicyclists. However, the safety and livability improvements would not, by themselves, reduce the area of impacts from non-local trucks.

The second category of transportation improvement provides for improvements on the recommended truck streets to increase the efficiency of truck movement and to encourage non-local trucks to stay on the designated route. However, the truck improvements by themselves would result in a greater number of truck trips on the designated truck streets.

1. Provide traffic calming to enhance pedestrian and bicycle safety for Lombard Street (Pier Park to St. Louis), Fessenden (Columbia Way to St. Louis), and St. Louis (Fessenden to Lombard), pedestrian and bicycle safety on Columbia Boulevard, and to create a street environment that helps to protect the neighborhood streets from incursion by non-local truck traffic; and
2. Redesign and reconstruct the intersections of Lombard/St. Louis/Ivanhoe, Ivanhoe/Philadelphia, and

Columbia Boulevard/Portland/Columbia Way, and the street segment of Burgard and Lombard from Rivergate entrance to Terminal Road, to provide for both improved truck movement, and pedestrian and bicycle safety.

### **Administrative Recommendations**

With Council adoption, the Portland Office of Transportation would be directed to consider:

- Two regulatory recommendations, which would require further study and staff action to assess the appropriate manner of implementation
- Three operational directives
- One policy

Of the regulatory actions recommended, one would assess the feasibility of limiting local deliveries to vehicles with no more than 18,000 lbs. gross vehicle weight (GVW). The second regulation recommended is for review and analysis of the present practices for the movement of hazardous materials, potentially affecting routing and delivery.

1. Assess the feasibility of limiting the gross vehicle weight (GVW), for all local deliveries, to 18,000 lbs.
2. Analyze the type and quantity of materials and materials routing presently allowed for hazardous materials, and make recommendations for any necessary changes to enhance protection for people, neighborhoods and natural resources.

Three recommendations are made affecting the operational or organizational aspects of the Portland Office of Transportation. A study is recommended that would be a follow-up study or continuation of the SJTS, to ascertain the effectiveness of implemented recommendations. The second operational recommendation would create a program for education about and enforcement of truck regulations, including providing a "point-of-contact" for both industry and citizens. The third recommendation would establish a program to inventory, review, design, place and maintain signs for truck traffic.

1. The St. Johns Truck Strategy Advisory Committee will be continued, to investigate the success of adopted/implemented short-term projects, and to recommend remedial or alternative actions if necessary.
2. A program promoting education and enforcement will be initiated to provide interested and effected parties with a point of contact, information services and enforcement of truck regulations.
3. A citywide (truck) sign program will be initiated, for the design and placement of new signs and maintenance of existing signs.

One policy recommendation is made, effecting the existing Transportation Element and the Transportation Element as proposed for amendment by the Transportation System Plan. This policy would be implemented by adding the Major Truck Street designation to the identified street segments on the city-wide and/or North Transportation District Truck Route Maps. The following policy is recommended for inclusion in the Transportation System Plan:

1. Designate the segments of Lombard Street, St. Louis Avenue and Ivanhoe Street, between Burgard Road and Philadelphia Avenue, as Major Truck Streets in the North Transportation District of the Transportation Element.

## **STUDY PURPOSE**

As a part of the 1992 update of the Transportation Element of the Comprehensive Plan, the North Portland Peninsula neighborhoods requested, and the City Council mandated, that the Portland Office of Transportation look at ways to reduce the amount of truck traffic traveling on neighborhood streets. At the same time, a need was identified for transportation system improvements for truck travel to commercial or industrial sites, the freeway system, and the St. John's Bridge.

The primary goal of the study is to eliminate or reduce conflicts between non-local truck movement and the residential and retail-commercial areas in St. Johns. The alternatives reviewed range from high-cost, regional issues such as construction of a new bridge, to low-cost and/or low-impact solutions such as signs. The Mission Statement best sums up the purpose of this study:

"Evaluate and recommend to City Council appropriate transportation solutions that address freight movement needs of the North Portland industrial areas and protect the St. John's residential and commercial hub from through-truck infiltration. The recommended solutions will recognize the contribution of freight movement to the local, regional and state economies, and that a significant portion of that freight is moved to and from the industrial areas of North, Northeast and Northwest Portland."

## **STUDY PROCESS**

The need to combine information and knowledge of infrastructure, neighborhood and trucking issues drove the selection of a combined technical and citizen advisory committee. The 17 member AC was composed of six citizen volunteers, including business representation, five representatives from truck-related businesses, three City of Portland employees, and representatives from ODOT, Metro and the Port of Portland. Co-Chairs provided the AC's leadership, one from the neighborhood side and one from the trucking side.

The St. Johns and University Park Neighborhood Associations, Friends of Cathedral Park, and the St. Johns Business Boosters were represented on the AC, while the Linnton Neighborhood Association and the Community Association of Portsmouth chose not to participate directly, but remained informed through receipt of agenda and minutes.

The SJTS AC conducted business through fifteen meetings held between April 19, 1999 and June 26, 2000, not including two Open Houses and the May 5, 2000 Columbia Corridor Information Fair. The two Open House events occurred on March 15, 1999 and May 6, 2000. All AC meetings, including three subcommittee meetings, were open to the public for observation and comment. The second Open House successfully elicited over 100 written comments. At least one progress report was delivered by staff to all identified neighborhood associations, and to North Portland Neighborhood Services.

In addition to the expertise brought to the AC by the agency representatives, the Port of Portland hired an engineering and environmental consulting firm (Parametrix, Inc.) to provide additional technical expertise for analysis of traffic impacts. The City Council and Port of Portland Board approved the consultant selection and work program. Other experts were also solicited to provide information or appear before the group. These other experts addressed relevant area projects and topics, including the St. Johns Bridge rehabilitation, hazardous materials, truck-related pollution, traffic calming, Federal Highway System regulation and rules, project cost, police enforcement, traffic modeling, commodity flow and truck mobility and access needs, and port operations.

The study process began with assumptions and concerns identified in 1991, during the review and update of the Transportation Element of the Comprehensive Plan. Both the first Open House and subsequent AC meetings added to the list of existing concerns and issues. Information on truck movement (2020 traffic modeling information, commodity flow patterns, and existing truck counts) was provided to the AC, including assumed growth patterns and Regional Transportation Plan assumptions about improvements to the regional and local street systems.

The AC reviewed an original list of 47 concept alternatives including several that were beyond the scope of this study. The AC proposed and adopted criteria by which to weigh the alternatives (See: Appendix B), and which were intended to assure that the alternatives met various study framework requirements and also provided a basic assessment of general performance, technical and implementation characteristics. Alternatives were selected for the short list that are intended to both enhance truck movement on the designated route and to protect bicycle and pedestrian safety and neighborhood livability. The final alternatives (See: Recommendation of the Advisory Committee, above.) form a package of actions to be taken in various locations, on various streets or at various intersections. The entire package of recommended actions is estimated to have a cost of \$6.7 Million, less than the \$10 Million identified as a target by the City Council.

## **PRELIMINARY EVALUATION**

The preliminary evaluation of 47 original alternatives (below) resulted in selection of nine specific projects, each with an emphasis on the improvement of bicycle and pedestrian safety. The AC presented these projects and the selected policies, programs and studies for public review and comment prior to their final deliberations. The preliminary evaluation by the AC resulted in projects, policies, programs and studies that worked together to achieve the desired objectives of this study. The expected outcome of the public review was either refinement or exclusion of the presented projects, and/or the way they were packaged.

**Policy, Program, Study and Project -Alternatives:**

1. The truck route accessing the St. Johns Bridge should be located on Lombard/St. Louis/Ivanhoe. *(Policy consideration)*
2. The truck route accessing the St. Johns Bridge should be located on Columbia Way/Fessenden. *(Policy consideration)*
3. Remove Ivanhoe from existing truck route; allow trucks to access Philadelphia Street/St. Johns Bridge via Lombard. *(Policy Consideration: A.3. Option H, pg 11, Problem Statement and Solution Proposal)*
4. The truck route accessing the St. Johns Bridge should be located on Lombard, east of St. Johns. *(Policy consideration)*
5. Identify a second (alternative) route for moving trucks across the peninsula: Fessenden, Smith, Lombard, and other alternatives. *(Policy Consideration)*
6. Limit local deliveries to trucks weighing 18,000 lbs. or less; prohibit heavier trucks except on designated route(s). *(Policy consideration)*
7. Request change of US 30 Bypass designation from Lombard, east of St. John's, to the recommended truck route. See 1 - 3, above. *(Request through region to National Highway Administration)*
8. Re-align Lombard between St. Johns and St. Louis, shifting roadway north and east of existing roadway, removing fronting residential structures, and install a sound wall to protect remaining residential properties. *(\$6.38m +/- 40%)*
9. Implement signing on I-5 to encourage/require the use of I-5 for access to US 30 or other west side destinations, and/or to direct trucks to Columbia Blvd. *(Regional Issue: request to ODOT)*
10. Create a full freeway interchange at N. Columbia Boulevard and I-5. *(In Regional Transportation Plan, \$70m +/-)*
11. Mandate and fund follow-up, including continuation for review by the existing committee, to determine the efficacy of short-term projects. *(Study)*
12. Consider use of T-2 as a support facility for T-4, T-6, Rivergate (or other terminals or facilities), barging deliveries, goods, etc. to these places, eliminating some quantity of trucks. *(See: Letter from Port Marine Division, Scott Van Wormer)*
13. Add ramp from eastbound Columbia Blvd. to northbound Portland Rd. and prioritize the movement between Portland Rd. and Columbia Blvd. *(A.1., Option A, pg 2, PSSP)*
14. Adjust signal timing: lengthen green time on designated truck routes, shorten signal cycles on non-truck streets, eliminate signals where possible on truck routes. *(A.1., Option B, pg 3, PSSP)*
15. Install signing at N Portland/N Columbia intersection, directing trucks to Columbia. *(A.1., Option C, pg 3, PSSP)*
16. Designate area truck routes and install directional signing. *(A.1., Option C, pg 3 and Option G, pg 4, PSSP: limited sign program)*
17. Initiate a truck signing program city-wide to provide identification/direction of appropriate routes (i.e., where are the truck routes) and discourage non-local truck movement where inappropriate. *(A.1., Option C, pg 3 and Option G, pg 4, PSSP: city-wide sign program)*
18. Add traffic capacity on I-205 through use of permanent HOV lanes. *(A.1., Option D, pg 3, PSSP)*
19. Add slip lane from southbound Denver to westbound Argyle Way *(A.1., Option E, pg 3, PSSP)*
20. Reconfigure I-5 from 3 travel lanes in each direction to 2 travel lanes in each direction with 2 center reversible lanes. *(A.1., Option F, pg 3, PSSP)*
21. Redesign/rebuild intersection of Ivanhoe/Lombard/St. Louis to better accommodate the movement of trucks from Lombard to Ivanhoe, but restrict truck movement from St. Louis to Ivanhoe. *(A.1., Option H, pg 4, PSSP)*
22. Same as above, but remove no housing. *(A.1., Option H, pg 4, PSSP)*
23. Realign the Philadelphia/Ivanhoe intersection to favor movement between the St. Johns Bridge and Ivanhoe. *(A.1., Option I, pg 5, PSSP)*
24. Remove or replace pedestrian overcrossing on Columbia Blvd. at Midway. *(A.1., Option J, pg 6, PSSP)*
25. Replace bridge over the UPRR tracks at Lombard, east of T-4. *(A.1., Option K, pg 6, PSSP)*
26. Redesign N Burgard between Columbia Blvd. and Terminal 4 to better accommodate trucks. *(A.1., Option L, pg 7, PSSP)*
27. Remove the signal at Argyle St./Interstate Pl. to facilitate movement on Columbia. *(A.1., Option M, pg 7, PSSP)*
28. Provide an updated study of a T-4 access road, to identify access to the St. Johns Bridge with minimum impact to residential streets. *(A.2., Option E, pg 8, PSSP)*
29. Reduce or eliminate left turn movements to and from Columbia Blvd., or design turn pockets to limit long vehicle access. *(A.3., Option A, pg 8, PSSP)*
30. Add curb extensions, median islands, traffic circles, or roundabouts at intersections to limit access of long vehicles. *(A.3., Option B, pg 8, PSSP)*
31. Place restrictions on large trucks at Portland Road, Columbia, Portsmouth intersections to direct trucks to Columbia Boulevard for east-west movement. *(A.3., Option B, pg 8 and C.1., A, pg 14, PSSP)*
32. Add 22-foot (split) speed bumps on Neighborhood Collector Streets: Columbia Way, Fessenden, St. Louis. Modifies travel time, especially for longer and heavier vehicles. *(A.3., Option C, pg 9, PSSP)*

## EXECUTIVE SUMMARY & RECOMMENDATION

33. Add 22-foot speed bumps on non-emergency streets: Fessenden, Columbia Way, Oswego, Columbia Blvd., Smith. (A.3., *Option C*, pg 9, of *SJTS, PSSP*)
34. Change the design of Fessenden to discourage non-local trucks. (A.3., *Options C-F*, ppg 9 and 10, *PSSP*)
35. Reduce posted speed limits on Neighborhood Collector Streets: Fessenden and St. Louis. (A.3., *Option D*, pg 9, *PSSP: request to ODOT*)
36. Eliminate the right-turn only lane on westbound Columbia Way to northbound Fessenden. (A.3., *Option E*, pg 10, *PSSP*)
37. Change the appearance and function of certain streets by reducing the number of through lanes by adding left turn lanes, bike lanes and parking: Fessenden, St. Louis, Columbia Way, Macrum. (A.3., *Option F*, pg 11, *PSSP*)
38. Change the allocation of roadway space on Philadelphia and the St. Johns Bridge to: two vehicle lanes and two bike lanes. (A.3., *Option G*, pg 11, *PSSP*)
39. Modify the existing truck route to have trucks turn off of Lombard to Ivanhoe at St. Johns, rather than St. Louis. (*Policy consideration: A.3. Option I*, pg 11, *PSSP*)
40. Enforce truck regulations, in concert with education of the trucking community. (A.3. *Option J*, pg 11, *PSSP*)
41. When the St. Johns Bridge is closed for repairs, the choice of detour routes should be analyzed for the possibility of designation of a permanent route or routes for trucks, not including the St. Johns Bridge. (A.3. *Option K*, pg 11, *PSSP*)
42. Redesign of N Portland/Marine Drive intersection to discourage use of N Portland Road. (A.3. *Option L*, pg 11, *PSSP*)
43. Survey Local Service Streets to alter the ability to speed for all vehicles, through use of 14-foot speed bumps. Some streets have already been evaluated for this option. (B.1., *Option A*, pg 12, *PSSP*)
44. Improve safety for pedestrians and bicyclists at street crossings, through the use of medians, curb extensions, marked crosswalks, bike lanes, and landscaping. Intersections to consider have been identified. (C.1., *Option A*, pg 14, *PSSP*)
45. Include pedestrian/bicycle safety elements in any recommendation increasing truck movement along any of the above routes. (C.1., *Option A and C*, pg 14, *PSSP*)
46. Review current Tri-Met bus routes and locations of current bus stops, for safety and influence on the flow of traffic. (C.1., *Option B*, pg 14, *PSSP*)
47. Install bike lanes where possible on designated bike routes. (C.1., *Option C*, pg 14, *PSSP*)

As might be expected, there were and continue to be concerns regarding improvements for truck movement. The most important concern is that an improved route for trucks will attract even more truck trips than before. However, the majority of the AC has recognized that trucks cannot be expected to adhere to a limitation of one truck route, if that route is insufficient to adequately handle all the expected truck traffic, especially when there is now no restriction on the choice of streets for truck movement.

## GENERAL FINDINGS AND CONCLUSIONS

Information has been provided to the AC to assist them in the preparation and selection of final recommendations, by compiling – as clearly as possible – the most relevant and fundamental findings and conclusions to the comparison of alternatives and the decision-making process.

- Since 1992 there has been no designated truck street(s) between Rivergate and Columbia Boulevard and the St. Johns Bridge. Truck movement through this area is unrestricted.
- Only with the designation of a non-local or “through” truck route can other streets have limitations to truck movement applied to them.
- The St. Johns Bridge is part of the Federal Highway System (US 30 Bypass) and within one mile of a designated National Network Highway (US 30). Any limitation to truck movement on the St. Johns Bridge must be based on safety; and ODOT engineers have found that the bridge has adequate structural integrity and design to accommodate trucks.
- Many of the non-local trucks traveling between I-5 and US 30 are now regularly using Fessenden Street and other residential and retail-commercial streets as de facto truck streets. As presently configured Fessenden is a broad and barrier free street with easy access from Portland Road and St. Louis Avenue.

- The number of trucks using Fessenden or other streets for non-local or “through” trips will become greater with time. Truck traffic modeling shows that a route consisting of I-5, Marine Drive, Portland Road, Columbia Way, Fessenden, St. Louis and Ivanhoe will remain the quickest route for non-local trucks moving between US 30 and I-5. There are a number of variants to this finding, but the use of Fessenden as a de facto truck street is typical of both the existing and future situation, unless change is implemented.
- The recommended truck street improvements are necessary to accommodate an increase in truck trips on those streets selected for truck movement, because truck trips are now distributed over several streets within the area. Additionally, the total number of truck trips is expected to continue to increase over time.
- Consolidation and growth of truck trips in the future may result in congestion, at times. Analysis of traffic operations (See: Appendix B), indicate that “all intersections can be expected to operate in an acceptable manner (LOS D or better) under all of the alternatives analyzed.” However, with an all-pedestrian phase added to the signal at Lombard and St. Louis the analysis indicates that the average vehicle delay would more than double and a volume to capacity ratio greater than one (1) would occur.
- Recommendations for signage, enforcement and non-truck street design changes, including enhanced bicycle and pedestrian safety, will provide additional incentives for trucks to remain on streets designated and designed for trucks.

The level of analysis and extent of proposed transportation improvements, as addressed by this study, limit the recommendations for the improvements to a conceptual basis. Specific detailed design of improvements to address the identified issues can and should be further developed with the involvement of the immediately affected residents, during the next phase of transportation improvement development.

*Recommendations for transportation improvements identify desired physical changes in the transportation system:*

*1. Traffic Calming and Bicycle/Pedestrian Safety Projects.*

- *Traffic calming for Lombard Street, from Pier Park to St. Louis Avenue could include, but not necessarily be limited to, lane restriping, curb extensions, pedestrian refuges, and/or a median or medians. Special attention needs to be paid at Reno Avenue to provide a cross-Lombard connection for Sitton Elementary School.*
- *Traffic calming for Fessenden Street, including the intersection of Columbia Way and Fessenden, from Columbia Way to St. Louis Avenue, could include, but not be limited to, lane restriping, curb extensions, pedestrian refuges, and/or a median in the curve at Seneca. The right turn lane from Columbia Way southbound to Fessenden Street westbound should be removed, reducing the incentives for trucks to travel this way. Local residents would evaluate the use of split speed bumps and on-street parking.\**
- *Traffic calming for St. Louis Avenue, from Fessenden Street to Lombard Street, could include, but not necessarily be limited to, lane restriping, curb extensions, pedestrian refuges and/or medians, particularly in the curve at Seneca. Local residents would evaluate the use of split speed bumps.\**
- *Pedestrian and bicycle safety improvements for Columbia Boulevard, from Portland Road to the Rivergate entrance. Improvements could include curb extensions, pedestrian refuges, median barriers, mid-block crossings and bike lane striping.*

\* (Fessenden and St. Louis Streets are Major Emergency Response Streets. The Fire Marshal has accepted the use of split speed bumps on Major Emergency Response Streets. Design treatments to reduce the convenience or appeal to trucks cannot interfere with emergency response needs.



These actions would increase pedestrian access and neighborhood connectivity, particularly for pedestrians needing to cross Fessenden, St. Louis and Lombard Streets or Columbia Boulevard. The safety of these streets would be improved for use by pedestrians and bicyclists.

Treatment of Columbia Way, Fessenden Street and St. Louis Avenue could result in a design that would be less appealing or even less accommodating to trucks. Median barriers could limit left turn movements for long vehicles from Columbia Boulevard on to local neighborhood streets.

Enhanced signal coordination could provide more frequent, safer opportunities for street crossings, without significant impact to vehicle progression.

- 2. Redesign/rebuild the intersections of Lombard/St. Louis/Ivanhoe, and Columbia Boulevard/Portland/Columbia Way. Realign the intersection of Ivanhoe/Philadelphia. Redesign the street segment of Burgard and Lombard from the Rivergate entrance to Terminal Road.*

Realignment and reconstruction of the identified intersections would facilitate movement of all vehicles between the St. Johns Bridge and Columbia Boulevard and/or Rivergate. Other features, such as an all-pedestrian signal phase, could further promote bicycle/pedestrian safety. Further, these improvements could be delayed until the bicycle/pedestrian safety improvements are complete. This would result in greater inconvenience for local trucks for the short term. However, any delay for non-local trucks could be a positive factor, as these trucks could become more familiar with and perhaps more comfortable using other regional facilities with their higher speed, and higher volume facilities.

Rerouting of local trucks during construction must occur whichever element is implemented first. Local access is maintained with the understanding that delays are necessary. Non-local trucks would be directed to I-5 during construction. Without traffic calming restrictions and pedestrian improvements in place it would be difficult to prevent trucks from using neighborhood streets. Having the bicycle and pedestrian improvements in place also provides mitigation for other projects coming soon to this area, including Interstate-MAX, St. Johns Bridge rehabilitation and the I-5 Preservation project.

Funding for traffic calming/pedestrian safety projects, for local volunteer committees, has been included in the engineering cost estimates for these improvements. Funding is usually spaced over a two-year period, the first year for planning and design and the second year for construction.

*The following administrative recommendations would effect the way the City and the Portland Office of Transportation, in particular, regulates trucks:*

- 1. Load limits. The AC has recommended a truck weight limit of 18,000-lbs. GVW, for local deliveries, if not citywide, at least on the North Portland Peninsula. Non-local trucks would be restricted to the regional truck system.*

The movement and loading of trucks is regulated by the Federal Highway Administration and by the Oregon Department of Transportation. Other regional practices and regulations, i.e. those of surrounding jurisdictions including the State of Washington, also effect truck movement in the City of Portland.

The issue of a restrictive weight limit for local trucks will require significant additional study before a recommendation could be made. Without additional study, the outcome of implementing such a restriction is unknown. What is known is that restricting the weight of local delivery trucks in the manner suggested would have a dramatic impact on the local freight and delivery industries, including:

- Fewer heavy and medium trucks present on city streets.
- More deliveries and more trucks would be necessary to distribute the same amount of goods and services.
- More fuel would be needed to distribute the same amount of goods and services.
- More land would need to be devoted to load size reduction and distribution activities.
- The economy of freight movement and the involved industries would be dramatically changed.
- The cost of goods and services would be effected.
- Such a regulation would have to be thoroughly investigated for its legal implications.

2. *The AC recommends a study of the type and quantity of materials and materials routing presently allowed for hazardous materials.*

Hazardous materials are defined by the federal government and identified in the City Code (Title 33, Planning and Zoning, Chapter 910, Definitions). The federal government, ultimately, controls of the movement of hazardous materials. In particular, the federal government regulates the packaging and labeling of hazardous materials. Regulations are applied based on the nature and quantity of hazardous materials.

Other regulations for the movement of hazardous materials are applied by the State of Oregon, including prohibition of access in specific situations presenting a hazard to trucks, such as the I-26 (Sunset) Tunnel, and the railroad crossing near NW Balboa and US 30.

The routing of hazardous materials is specifically addressed in the City Code (Title 33, Planning and Zoning, Chapter 840, Hazardous Substances Review, Section 030, Evaluation Factors) and in so doing references the "City-designated routes for the transport of hazardous substances". Non-local trucks carrying hazardous materials are required to use identified truck streets, emphasizing the regional system, and local hazardous materials truck trips are required to access the truck streets as directly as possible from their loading points. Hazardous materials are delivered locally as well, including fuels (gasoline, diesel, natural gas, propane, etc.) and numerous industrial, commercial and household products.

Radioactive materials, poison gases and explosives do not travel through Portland (or other urban areas) unless absolutely necessary. Example: Trojan waste (spent fuel rods) on its way to Hanford will go around Portland, in part via the State of Washington.

3. *The AC recommends an ongoing or follow-up study to the St. Johns Truck Strategy, including members of the SJTS AC, to investigate the success of adopted/implemented projects, and to recommend remedial or alternative actions if necessary.*

The concern and dedication of the SJTS AC members to resolving these issues would provide a valuable and informed body of advisors. However, the next phase of development, further definition of as yet conceptual recommendations, particularly in the realm of traffic calming and pedestrian and bicycle safety

is typically reviewed and discussed with the nearby residents and property owners who will be most effected. Re-initiation or continuation of this committee, in whole or in part, to review the impacts of implemented projects would not necessarily conflict with the standard procedure of involving the nearby residents and property owners in project development. A follow-up study of traffic patterns has been a standard procedure of traffic calming projects.

- 4. The AC recommends the creation/implementation of a program providing for education and enforcement regarding truck issues and regulations. Incorporated into such a program would be a trucking "contact", providing information and liaison to and between the affected parties.*

Many of the functions assumed for such a program already exist within PDOT. Truck policy, truck street classifications, and liaison with regional transportation planning, including trucks, are administered by Transportation Planning. The Bureau of Transportation Systems Management, Parking Control, administers the siting and operation of loading zones and other in-the-right-of-way truck activities, such as parking. The Bureau of Transportation Systems Management, Traffic Investigations, administers and directs routing for oversized loads and provides liaison to ODOT administrators.

Functions for which we have no active program, such as education, would have to be created. Enforcement and even administration would need to involve all affected parties including, but not necessarily limited to, emergency response (police/fire), trucking interests, maintenance providers, and others such as ODOT.

- 5. A citywide (truck) sign program, for new signs and maintenance of existing signs. Such a program would assure identification of designated truck streets, and encourage the use of those streets for truck trips.*

There are several of the necessary elements for such a program already in place in PDOT, including recent sign inventories and staff that already deal with the design, placement and maintenance of signs.

- 6. Designated truck streets. The AC has recommended that a combination of Lombard Street, St. Louis Avenue and Ivanhoe Street be designated as the appropriate truck route between Columbia Boulevard and Philadelphia Street. Each of the identified segments of these streets should be classified as Major Truck Streets.*

Such a designation would comply with the Regional Freight System map of the Regional Transportation Plan. This route was the designated truck route prior to the 1992 update of the Transportation Element. It is still the most common route for trucks between Rivergate and Columbia Boulevard and the St. Johns Bridge. A single, designated route for trucks will reduce the area of truck impacts on the St. Johns Neighborhood. However, without substantial improvement there will be a significant increase in truck impacts on the designated route, because of a significant increase in truck trips.

## **SUMMARY OF BENEFITS AND IMPACTS**

The recommended actions constitute an attempt to balance the reaction to the conflict between truck traffic and the St. Johns town center environment. The City Council mandate identified a target amount of money for improvements of \$10 Million. Because the preliminary estimates of all the selected actions

is less than that target amount (Approximately \$6.7 Million), the AC has not identified a number of projects that would compete for funding based on assessment or grading of those projects. The AC recommends that action by the City Council should consider any necessary amendments to the identified package, and adoption of the package as a whole.

The balance sought is between the desired pedestrian-oriented, compact urban town center and the needs of the industries that help to support that town center, the North Portland peninsula and Portland as a whole. Eliminating the previously existing truck street designations has resulted in a lack of an identified truck route, in turn, encouraging truck dispatchers and drivers to find the route best suited for their needs. Existing truck patterns reflect that lack of definition:

- Significant numbers of trucks are using Columbia Way and Fessenden Street to travel between the Columbia Corridor and I-5, and the St. Johns Bridge; and
- Other trucks are using local service streets to try to avoid congestion on Fessenden or Lombard when that occurs.

As a result of this lack of definition, more of the St. Johns area is affected by truck impacts. Defining a truck route and requiring non-local trucks to concentrate their activities on that route will increase the truck-related impacts on properties adjacent to those streets, but the area of St. Johns with truck-related impacts will be reduced, with fewer residents and businesses feeling those impacts.

Certain existing "bottlenecks" and recommended bicycle, pedestrian and aesthetic improvements on the recommended truck streets could result in inefficiencies for trucks, causing them to look for alternative routes and defeating the purpose of designated truck streets. However, with care, improvements can result in a calmer traffic environment while at the same time providing for a more efficient movement of vehicles, including trucks.

The converse can also be true. Improvements to the streets not recommended as truck streets, could result in more trucks and greater truck impacts on those streets. But in this case too, care with the type of improvement provided can result in a less convenient route for trucks without creating a difficult environment for other vehicles, and an improved environment for bicyclists and pedestrians, including transit users.

A number of documents and papers were generated for this study, to improve awareness and knowledge of the situation prior to this study or were developed in the same time frame.

### **SJTS Papers:**

(Start Up)

- Mission Statement, St. Johns Truck Strategy, March 1999
- Overview and Objectives, St. Johns Truck Strategy, March 1999
- Issues, St. Johns Truck Strategy, March 1999
- Planned/Programmed Transportation Projects and Studies, March 1999
- Truck Related Policies, City of Portland, March 1999

(Open Houses)

- Open House, Public Comments: Summary, Open House No. 1, March 15, 1999
- Open House, Public Comments: Summary, Open House No. 2, May 6, 2000

(Modeling)

- St. Johns Truck Strategy: Modeling Analysis, May 2000, PDOT

**SJTS Memoranda and Letters:**

(Memoranda)

- Staff to AC: Proposal for Subcommittee(s) Presentation of Selections Criteria and Alternatives for the Advisory Committees Consideration, July 1999
- Staff to AC: Preliminary Truck Travel Time Comparisons in St. Johns Area, August 16, 1999
- Staff to AC: Preliminary Selection of Alternatives, December 1999
- Port of Portland to AC: Barging Containers between Marine Terminals 2 and 6, August 1999
- Staff to AC: No Trucks on the St. Johns Bridge, April 3, 2000
- Staff to AC: Truck Restrictions on the National Network, Response from the Federal Highway Administration, June 2, 2000
- Federal Highway Administration to Mike Jones: Reasonable Access for Trucks, June 2000

(Letters)

- AC Co-Chairs to Metro: Regional Transportation Plan Priorities, with attached comments from the Friends of Cathedral Park and St. Johns Neighborhood Association, November 15, 1999
- Commissioner Hales to William Michael Jones: Truck Route from Swan Island to Rivergate, March 3, 2000

**Non-SJTS Studies, Papers and Reports:**

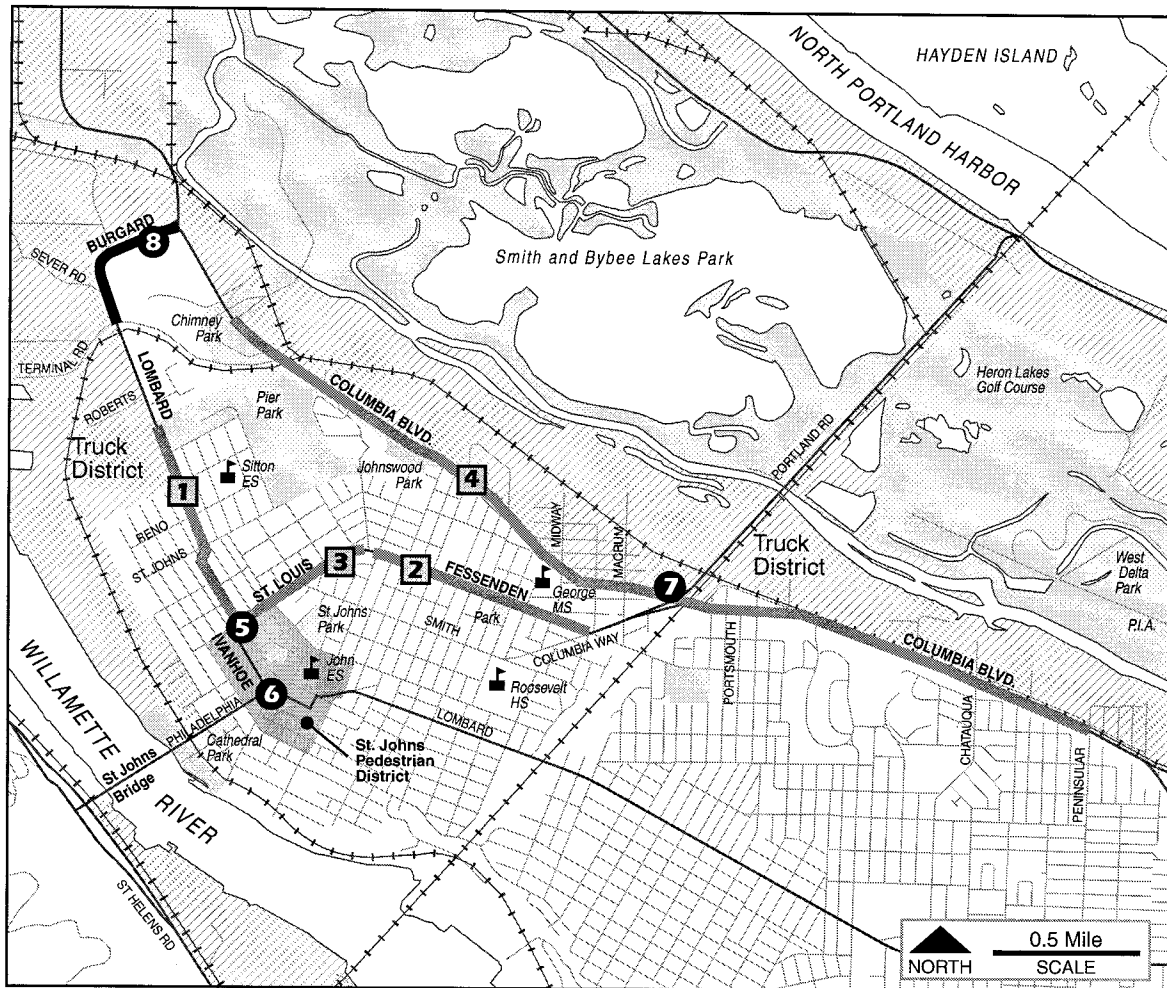
- St. Johns Waterfront Access Study, City of Portland, Bureau of Planning, August 1977
- North Portland Assets and Resources, October 22, 1998 Projects, Plans and Studies in the North Portland Areas, March 1999
- A Study of the Pedestrian Realm and Multi-Modal Access in the St. Johns Town Center, Professional Planning Workshop, Portland State University, March 2000
- Federal Regulation Excerpts: CFR 172.500 - .560, Hazardous Materials Compliance; CFR 397.61 - .77, Routing of Non Radioactive Hazardous Materials and CFR 658.23, Truck Size and Weight, Route Designations – Length, Width and Weight Limitations

**Development of Recommendations:**

- Problem Statements and Solution Proposals, October 29, 1999
- Consolidated Selection Criteria Chosen by the Advisory Committee: November 15, 1999, Amended by the Advisory Committee February 14, 2000
- Alternatives Scoring (Matrix), December 21, 1999
- Selection of Alternatives by Category (Final Selection), February 24, 2000
- Policies, Programs & Studies, May 2000
- Phase 1 Projects, May 2000
- Phase 2 Projects, May 2000
- Phase 3 Projects, May 2000
- Project Cost Estimates, July 21, 2000
- Programs and Policies List, June 2000
- Reordered Project List, June 2000

The original action or project alternatives are identified on the following map:

**FIGURE I  
RECOMMENDED PROJECTS MAP**



Traffic Calming and Bicycle/Pedestrian Safety Projects	Truck Street Improvements
<b>1</b> Lombard St.	<b>5</b> Lombard/St. Louis/Ivanhoe Intersection
<b>2</b> Fessenden St	<b>6</b> Ivanhoe/Philadelphia Intersection
<b>3</b> St. Louis Ave.	<b>7</b> Columbia Blvd/Portland Rd/Columbia Way Intersection
<b>4</b> Columbia Blvd.	<b>8</b> Burgard/Lombard Street Segment

## WHY STUDY THE COLUMBIA CORRIDOR AND THE NORTH PORTLAND PENINSULA

The purpose of the Columbia Corridor Transportation Study is to provide a comprehensive vision for transportation policy and improvements that will serve the diverse uses within the Corridor well into the 21st century. The Columbia Corridor reaches from the Rivergate Industrial District on the west to the City of Troutdale on the east.

The St. Johns Truck Strategy (SJTS), referred to as the North Portland Peninsula Truck Circulation Study in the Columbia Corridor Transportation Study (City of Portland, Office of Transportation, 1999) encompasses the western one-third of the Columbia Corridor (Figure 2). The SJTS study area specifically includes all of the North Portland Peninsula generally west of the Burlington Northern Rail Road "cut", a below grade rail corridor, at N. Carey Boulevard south of N. Columbia Boulevard, and west of Martin Luther King Jr. Boulevard, north of N. Columbia Boulevard.

The request for this study came as a result of the 1992 update of the City's Transportation Element of the Comprehensive Plan.

Residents living on the peninsula asked the City to look at ways to reduce or eliminate the impacts of truck traffic moving to and from the St. Johns Bridge; N. Fessenden Street, among others, was identified as being adversely impacted by truck traffic.

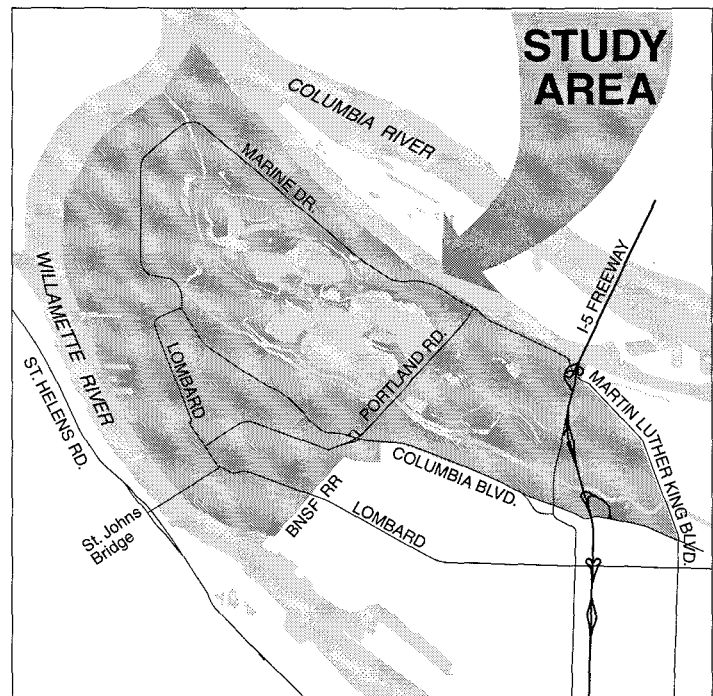
The SJTS completes the Columbia Corridor Transportation Study's transportation vision for the entire corridor. The SJTS portion of this study focuses on:

- Reducing through or non-local truck trips in predominately residential and retail-commercial areas of the peninsula
- Mitigation of truck impacts
- Designation of truck streets
- Improvement of those streets for both through and local truck trips using the St. Johns Bridge

### Mission Statement:

Evaluate and recommend to City Council appropriate transportation solutions that address freight movement needs of the North Portland industrial areas and protect the St. Johns residential and commercial hub from through-truck infiltration. The recommended solutions will recognize the contribution of freight movement to the local, regional and state economies, and that a significant portion of that freight is moved to and from the industrial areas of North, Northeast and Northwest Portland.

**FIGURE 2**



**Objectives:**

- Identify ways in which truck routing can be improved to and from the St. Johns Bridge, Rivergate and I-5
- Determine how non-local truck traffic can be eliminated or reduced on residential and retail-commercial streets

Previously identified alternatives for the efficient movement of trucks, including a reduction in non-local trucks through neighborhoods include the following ideas:

- Prohibit through trucks on Local Service Streets to reduce truck impacts on the neighborhoods
- Improve the Lombard/Ivanhoe route to make this truck route more efficient
- Consider a new Willamette River bridge between Rivergate and US 30 for truck movement
- Consider creating a new truck route through the Terminal 4 facilities to avoid use of steep residential streets to access industries along the St. Johns waterfront

Additionally, the City Council determined that the strategy selected will:

- Utilize the existing local and regional street system
- Be a short-term (2-5 year) solution
- Not include more than \$10 million in solutions
- Coordinate with other North Portland projects
- Carefully analyze solutions so as to not shift a problem to a different location



## AREA CHARACTER

The study area (Figure 3) is a peninsula, which is defined by the confluence of the Willamette and Columbia Rivers. Approximately two-thirds of the study area is industrial, and the remaining one-third is residential and retail-commercial. The study area includes the North Portland Truck District, in turn including the Rivergate Industrial District, and a small portion of the Columbia South Shore Industrial District. The St. Johns and Cathedral Park Neighborhoods occupy the remainder of the study area.

Much of the Rivergate Industrial District and the west end of the Columbia South Shore Industrial District is built on fill (river dredging) in and around the Smith and Bybee Lakes recreation area and the Columbia River sloughs. The area is flat and low, with occasional stands of Cottonwood and Alder, or even coniferous trees. The majority of both the Willamette and Columbia River frontages have traditionally been occupied by river-related industrial uses. More recently, other uses (residential, open space) have interrupted the industrial dominance. The St. Johns and Cathedral Park area is mostly developed and urban in character.

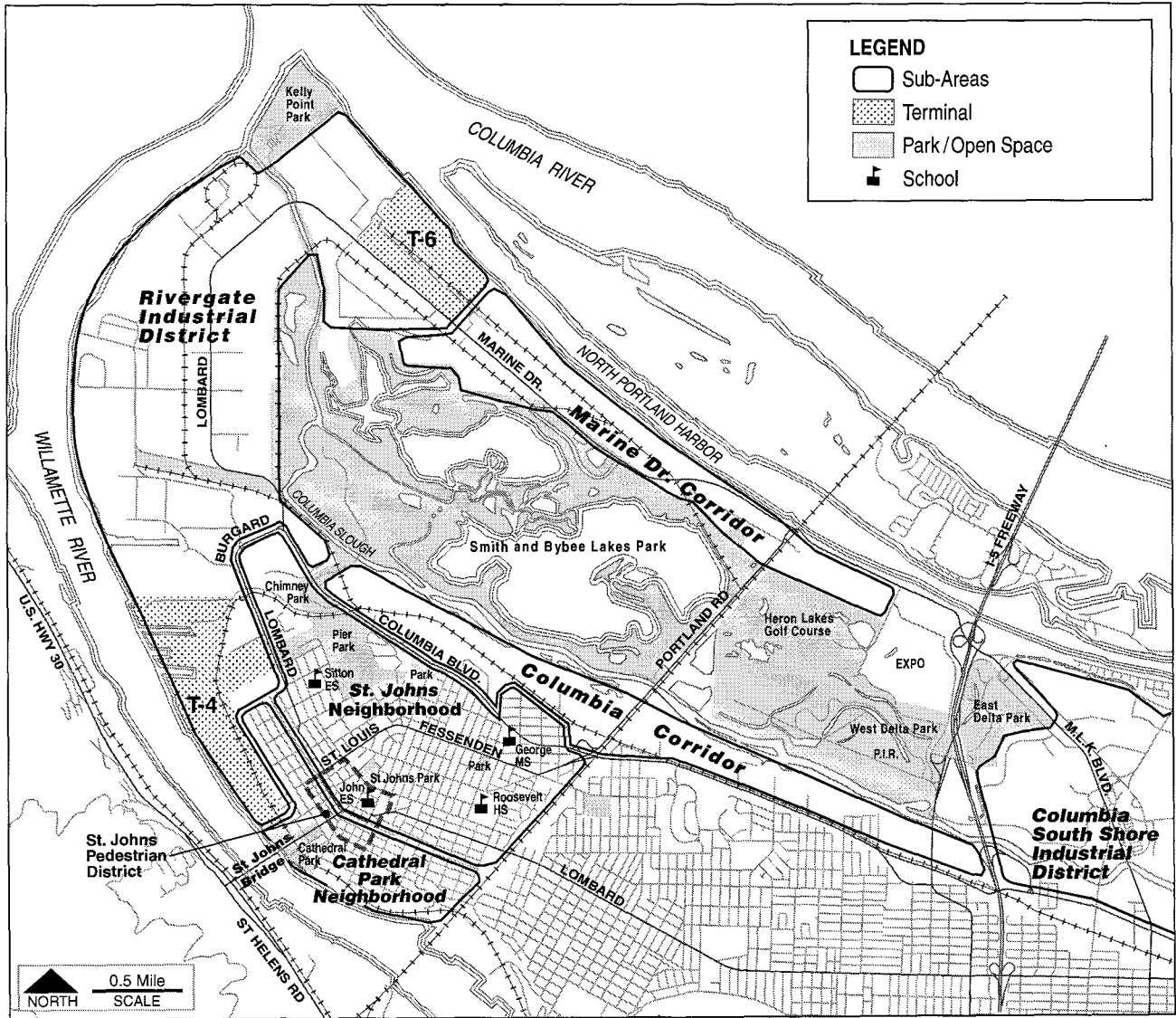
## LAND USE

A broad range of land use occurs within the study area. Generally, south of N. Columbia Boulevard and Pier Park, those activities are residential and retail. This area includes the Cathedral Park and St. Johns Neighborhoods, including the St. Johns Pedestrian District, with a population of approximately 12,000 (1994 statistics, Regional Transportation Model, Transportation Analysis Zone data, Metro, 1999). Retail employment in the area totals 3,548 jobs (1994). North of Columbia Boulevard and west of Pier Park, the land uses are industrial and open space, including the Port of Portland's Terminals 4 and 6, the Rivergate Industrial District, the Smith and Bybee Lakes open space, Chimney and Kelly Point Parks, and the Columbia River sloughs. Non-retail jobs in the area numbered 17,796 (1994).

The St. Johns and Cathedral Park neighborhoods are characterized by single-family homes, but multi-family living is on the increase in the area. Retail-commercial uses are dispersed along N. Fessenden and Lombard Streets (mostly), and concentrated within the St. Johns Pedestrian District (Downtown St. Johns).

Large, single-story buildings (warehouses) dominate in the Rivergate Industrial District. The predominant function is warehousing and distribution. Expansive outdoor work and/or storage areas, and equipment for loading and unloading ships (docks, cranes, and conveyors) characterize the Port's terminals.

**FIGURE 3  
AREA CHARACTER AND LAND USE**



## TRANSPORTATION NETWORK CHARACTERISTICS

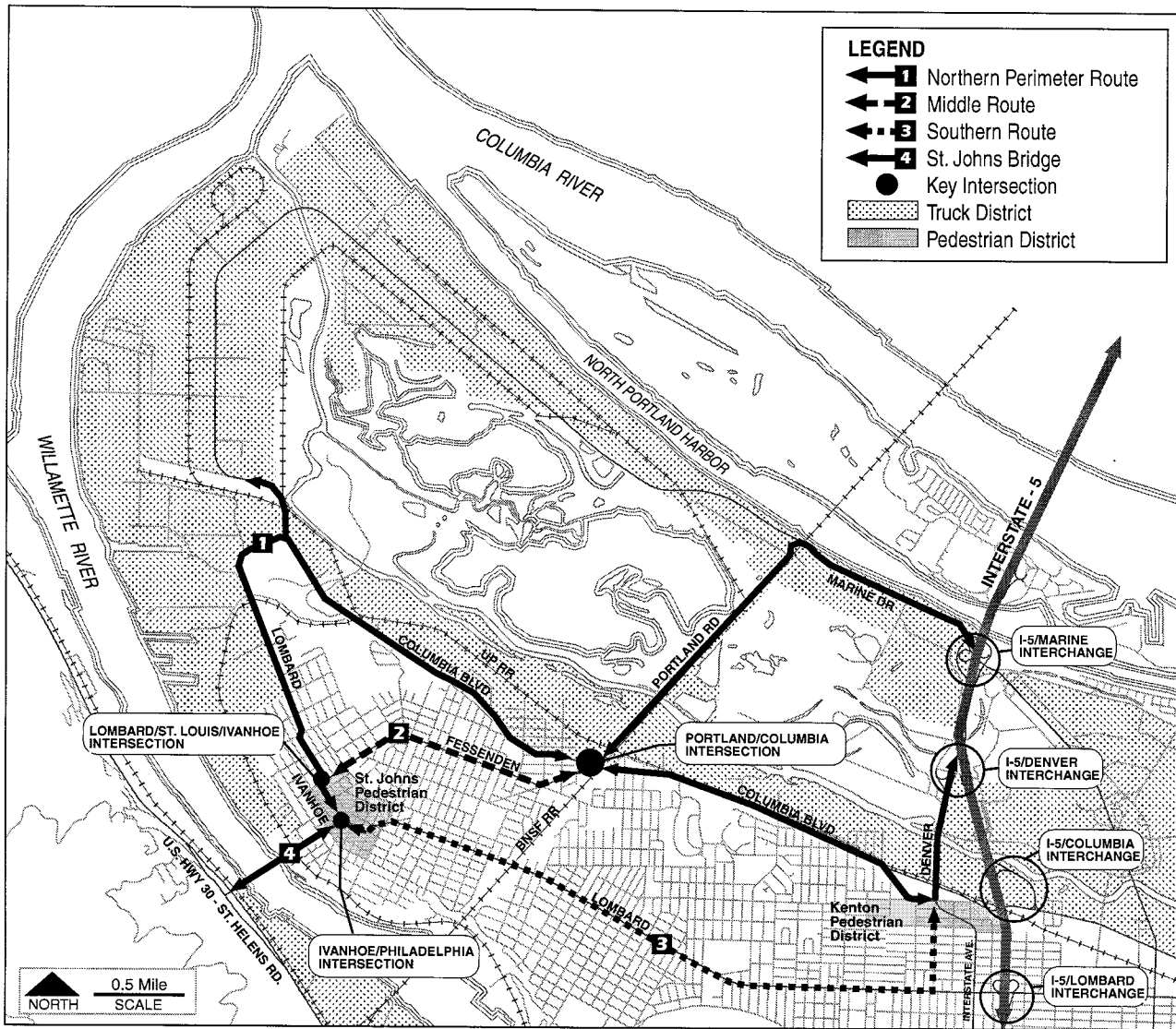
The east-west roadway system in the SJTS study area consists primarily of N. Marine Drive, Columbia Boulevard, and Fessenden and Lombard Streets. Marine Drive and Columbia Boulevard lie within or define an edge of the North Portland Truck District. In addition to their inherent status as truck streets, they are both Major City Traffic Streets. Fessenden Street is a Neighborhood Collector. Lombard Street (east of St. Johns) is a District Collector. Neither is a designated truck street, but Lombard is designated as the US 30 Bypass.

While there is at the time of this study no officially designated truck street, or streets, between the North Portland Truck District and the St. Johns Bridge, the Columbia, Burgard, Lombard, St. Louis, Ivanhoe combination of streets is presently used as the de facto (northern) truck route. The affected street segments are designated as Major City Traffic Streets. The northern route serves local and non-local trucks traveling between N. Columbia Boulevard or Marine Drive, and US 30 on the west side of the Willamette River. The Marine Drive or Columbia, Portland, Fessenden, St. Louis, Ivanhoe combination of streets (middle route) is used frequently by non-local trucks traveling across the peninsula. I-5 or Interstate to N. Lombard Street west into St. Johns (southern route) is also used, but by considerably fewer trucks.

The existing routes can be described in the following manner:

1. Northern Perimeter Route. The first of two District Objectives for the North District Policies, of the Transportation Element of the Comprehensive Plan, encourages non-local truck traffic to go around the residential and retail-commercial areas. The Columbia, Burgard, Lombard, St. Louis, Ivanhoe combination of streets were designated as truck streets by the City in the 1977 Transportation Element, and only deleted in 1992 at the request of north Portland citizens, until this study could be completed. The northern route is identified as a truck route by Metro in the present Regional Transportation Plan, Interim Regional Freight System Map. This same route is also presently considered a "connector providing access to a Marine Terminal" by ODOT.
2. Middle Route. The Marine Dr. or Columbia, Portland Rd., Fessenden, St. Louis, Ivanhoe combination of streets is used mostly by non-local trucks, and provides a quicker and more direct route between I-5 and the St. Johns Bridge than does the northern route. However, this route goes through the middle of the St. Johns neighborhood, creating greater conflicts with residences and retail properties than does the northern truck route.
3. Southern Route. The segment of N. Lombard Street, east from St. Johns, is also used by trucks, but less frequently because of numerous signalized intersections, narrow lanes and heavier traffic. The southern route also creates conflict between heavy trucks and residential uses, and an even greater conflict with retail uses than either of the other routes. However, this route is designated as a part of the National Highway System (US 30 Bypass).
4. St. Johns Bridge. The location of the St. Johns Bridge requires that trucks using any of the three routes to access the bridge must enter the St. Johns Pedestrian District, with its mix of residential and retail-commercial uses.

**FIGURE 4  
TRANSPORTATION NETWORK CHARACTERISTICS**



The year 2020 modeling done for this study (St. Johns Truck Strategy Modeling Analysis, City of Portland, Office of Transportation, 2000) shows that while the volume of trucks will increase by approximately one and one-half times, these patterns will remain essentially the same, unless significant changes are made.

## TRUCK CHARACTERISTICS

A common question when discussing truck-freight issues is what are these policies and/or regulations addressing? The Columbia Corridor Transportation Study defines freight movement, in terms of trucks, as the movement of heavy and medium trucks. Light commercial trucks cannot be distinguished from private vehicles, so are excluded. Medium trucks include trucks with 2 to 4 axles, and two-axle trucks with six tires. Heavy trucks include all articulated trucks, trucks with one to three trailer, and/or 3 to 9 axles. This review assumes private vehicle and small truck access should be maintained on all streets, in keeping with neighborhood needs.

## TRUCK EXAMPLES



**Large Dump, Heavy Truck**



**Short Container, Heavy Truck**



**Container, Heavy Truck**



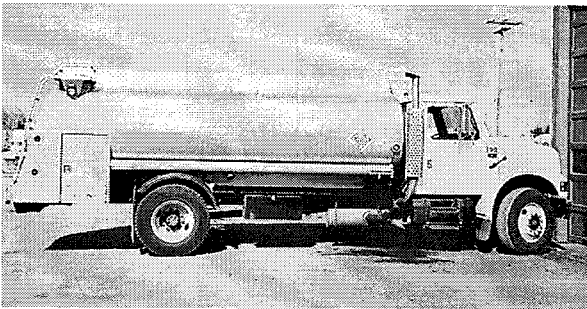
**Combination, Heavy Truck**



**7-axle, Heavy Truck**



**Garbage Container, Heavy Truck**



**2-axle, Medium Truck**



**2-axle, Medium Truck**



**Tri-Met Passenger Van**



**Light Flatbed Truck**

The universe of alternatives selected for consideration did not stop at the mandated short-term solution. Creating such a list of alternatives included substantial interest in a permanent or long-range solution that would remove trucks from the St. Johns core area and Pedestrian District, providing an alternative to the use of the St. Johns Bridge for non-local truck traffic. Both long and short-term projects are included in the following discussion.

## LONG-RANGE ALTERNATIVES

The St. Johns Truck Strategy Advisory Committee notes that the short-term recommendations for projects address only improvement to the existing situation, which includes inherent conflicts. There is no short-term solution or easy fix that would separate the existing truck-street choices from the residential and retail-commercial areas of St. Johns, without a significant impact on freight movement. For many local as well as non-local truck trips, the St. Johns Bridge provides the most convenient, obvious, and efficient route between US 30 and the Rivergate Industrial District, Columbia Corridor and I-5.

The conflicts created by the existing choices for truck routes across the peninsula will continue to worsen as truck trips increase. These conflicts are likely to be solved only through the creation of an alternative to the present route choices (Figure 5). Such an alternative would necessarily find a way to separate truck traffic from the St. Johns Pedestrian District. Such a separation, in turn, strongly implies the creation of an alternative to the use of the St. Johns Bridge for freight movement between US 30 and the Rivergate Industrial District, Columbia Corridor and I-5.

Directing trucks to use the I-5 Freeway and the Fremont or Marquam Bridges, as the only access to and from US 30 will create significant inefficiencies for the movement of both local and non-local truck-freight because of an increase in miles of vehicle travel and travel time. It also means only I-205 would provide a back up route to the use of I-5, resulting in even greater vehicle miles and travel time for access to US 30.

To provide a complete solution to the conflicts between truck-freight and residential and retail-commercial uses, separating truck trips from the St. Johns Pedestrian District is essential. Three new routes have been identified as providing for the desired separation:

- 1. North Willamette Crossing.** Build a bridge between the Rivergate Industrial District and US-30. This option is currently included in the Regional Transportation Plan Preferred List, for study. This option has a high potential in terms of capturing the cross-peninsula non-local truck movement on the peninsula. Travel time analysis indicates that this route would provide competitive trip times with possible alternatives (St. Johns Truck Strategy: Modeling Analysis, 2000).
- 2. Burlington Northern Rail Road Bridge.** Rebuild and/or modify the Burlington Northern Rail Road Bridge and the N. Carey Boulevard right-of-way and Rail Road "cut" to accommodate trucks. This option has the highest potential to capture cross-peninsula non-local truck movement on the peninsula. Travel time analysis indicates that this route would provide competitive trip times with possible alternatives (St. Johns Truck Strategy: Modeling Analysis, 2000).

**3. River Road.** Construct a riverbank roadway from the Rivergate Industrial District, through Terminal 4, to Swan Island to accommodate trucks. By itself this option will not result in the separation of a significant number of non-local truck trips from the St. Johns core area and Pedestrian District. Additionally, a riverbank roadway must overcome several challenges presented by the existing situation:

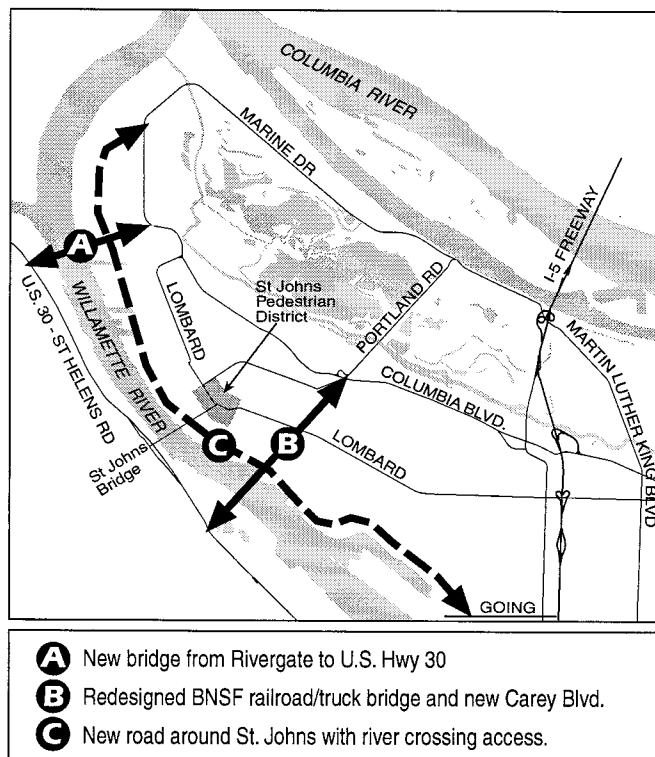
- Trucks passing through or around Cathedral Park
- Conflict with railroad and/or port operations
- Existing and proposed river-related development
- Several different ownerships (Port of Portland, Union Pacific, McCormick, EPA, Zidell, University of Portland, City of Portland, et. al.)
- Potentially conflicting plans for a riverbank greenway trail
- Environmental concerns created by the need for fills, retaining walls, or a bridge structure along significant portions of the identified riverbank
- Significant portions of the riverbank area are zoned to preserve natural features, discouraging or even prohibiting development

While the two bridge options include some potential for environmental conflicts, the river road option displays a low potential to capture any significant truck movement by itself. There is no significant movement of trucks between the Rivergate and Swan Island Industrial Districts (St. Johns Truck Strategy: Modeling Analysis, 2000). The potential to capture non-local truck movement is only significant for the third option when one of the two preceding alternatives is also in place, and a connection between the "River Road" option and one of these new river crossings is made.

All three of these options have been recommended and forwarded to Metro for consideration under the Regional Transportation Plan. The Regional Transportation Plan includes a recommended study to determine the need and/or appropriate location for a bridge crossing near the mouth of the Willamette River (See: Appendix C).

Letters from the two affected neighborhoods accompanied this recommendation. The St. Johns Neighborhood Association has gone on record as rejecting all interim (short-term) actions as inadequate to the needs of the peninsula and, instead, have consistently promoted one or some combination of all the above long-term actions as necessary. The Friends of Cathedral Park have also expressed a preference for a long-term solution, eliminating the movement of non-local trucks through St. Johns. (See: Appendix C)

**FIGURE 5  
LONG RANGE OPTIONS**





## SHORT-TERM ALTERNATIVES

The selection of a universe of alternatives for consideration (Figure 6), including the previously identified long-range alternatives, incorporated the following objectives identified in 1992:

- Prohibit through trucks on Local Service Streets to reduce truck impacts on the neighborhoods.
- Improve the Lombard/Ivanhoe route to make this truck route more efficient.
- Consider a new Willamette River bridge between Rivergate and US 30 for truck movement.
- Consider creating a new truck route through the Terminal 4 facilities to avoid use of steep residential streets to access industries along the St. Johns waterfront.

The prohibition of trucks on Local Service Streets has been considered and included in the possible bicycle/pedestrian actions, although the Advisory Committee's interest in improvements was more focused on discouraging trucks on neighborhood streets, so as not to prohibit local deliveries. Improvements to the Lombard/Ivanhoe route are proposed. Both a new Willamette River bridge and a riverfront access to industrial areas, including Terminal 4 were considered and recommendations passed on to Metro.

The Advisory Committee then added to the universe of alternatives in two ways. First, discussion by the Advisory Committee, plus the experience and professional expertise of the Bureaus of Transportation Engineering and Development, and Transportation System Management with similar situations led to the production of the Problem Statements and Solution Proposals (See: Appendix B), which identified and explained the majority of the alternatives considered by the Advisory Committee. Secondly, the Advisory Committee continued to generate totally new alternatives or previously identified alternatives with a new twist throughout the process.

The alternatives generally fell into five categories, including:

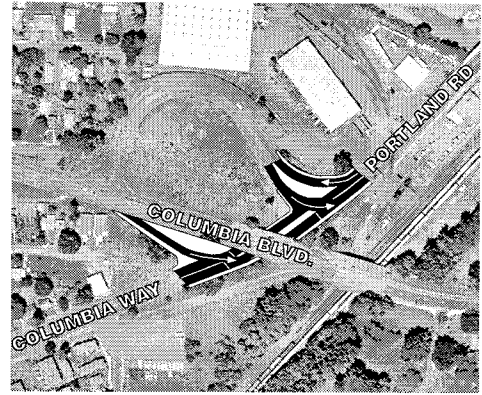
- Pedestrian and bicycle safety
- Neighborhood livability
- Discouragement of non-local truck movement on certain streets or into certain areas
- Consolidation and improvement of non-local truck movement
- Information or directive to truck firms and truck drivers

Forty-seven alternatives were identified for consideration, including:

1. The truck route accessing the St. Johns Bridge should be located on Lombard/St. Louis/Ivanhoe. (*Policy consideration*)
2. The truck route accessing the St. Johns Bridge should be located on Columbia Way/Fessenden. (*Policy consideration*)
3. Remove Ivanhoe from existing truck route; allow trucks to access Philadelphia Street/St. Johns Bridge via Lombard. (*Policy Consideration: A.3. Option H, pg 11, Problem Statement and Solution Proposal*)
4. The truck route accessing the St. Johns Bridge should be located on Lombard, east of St. Johns. (*Policy consideration*)

## CHAPTER 3

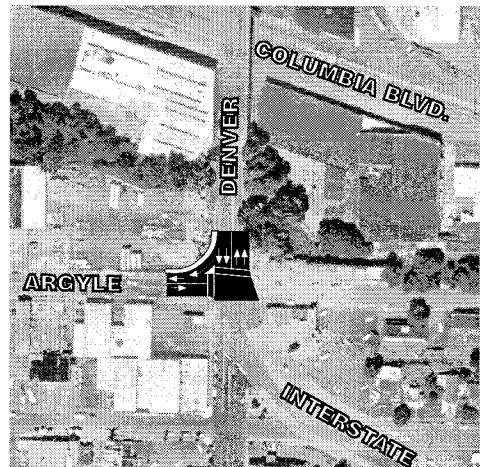
5. Identify a second (alternative) route for moving trucks across the peninsula: Fessenden, Smith, Lombard, and other alternatives. (*Policy Consideration*)
6. Limit local deliveries to trucks weighing 18,000 lbs. or less; prohibit heavier trucks except on designated route(s). (*Policy consideration*)
7. Request change of US 30 Bypass designation from Lombard, east of St. John's, to the recommended truck route. See 1 - 3, above. (*Request through region to National Highway Administration*)
8. Re-align Lombard between St. Johns and St. Louis, shifting roadway north and east of existing roadway, removing fronting residential structures, and install a sound wall to protect remaining residential properties. (\$6.38m +/- 40%)
9. Implement signing on I-5 to encourage/require the use of I-5 for access to US 30 or other west side destinations, and/or to direct trucks to Columbia Blvd. (*Regional Issue: request to ODOT*)
10. Create a full freeway interchange at N. Columbia Boulevard and I-5. (*In Regional Transportation Plan, \$70m +/-*)
11. Mandate and fund follow-up, including continuation for review by the existing committee, to determine the efficacy of short-term projects. (*Study*)
12. Consider use of T-2 as a support facility for T-4, T-6, Rivergate (or other terminals or facilities), barging deliveries, goods, etc. to these places, eliminating some quantity of trucks. (*See: Letter from Port Marine Division, Scott Van Wormer*)
13. Add ramp from eastbound Columbia Blvd. to northbound Portland Rd. and prioritize the movement between Portland Rd. and Columbia Blvd. (*A.1., Option A, pg 2, PSSP*)
14. Adjust signal timing: lengthen green time on designated truck routes, shorten signal cycles on non-truck streets, eliminate signals where possible on truck routes. (*A.1., Option B, pg 3, PSSP*)
15. Install signing at N Portland/N Columbia intersection, directing trucks to Columbia. (*A.1., Option C, pg 3, PSSP*)
16. Designate area truck routes and install directional signing. (*A.1., Option C, pg 3 and Option G, pg 4, PSSP: limited sign program*)
17. Initiate a truck signing program city-wide to provide identification/direction of appropriate routes (i.e., where are the truck routes) and discourage non-local truck movement where inappropriate. (*A.1., Option C, pg 3 and Option G, pg 4, PSSP: city-wide sign program*)
18. Add traffic capacity on I-205 through use of permanent HOV lanes. (*A.1., Option D, pg 3, PSSP*)
19. Add slip lane from southbound Denver to westbound Argyle Way (*A.1., Option E, pg 3, PSSP*)



Improve circulation between Portland Portland Blvd. and Columbia Blvd. (13)

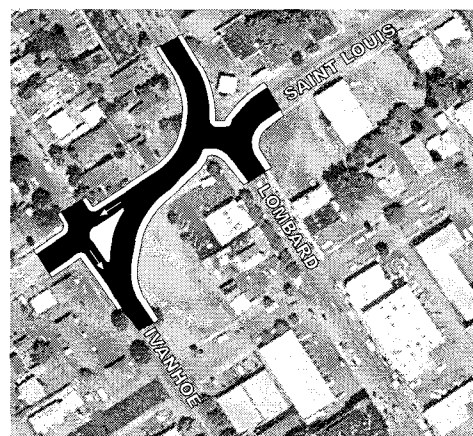


Signs on I-5 can direct trucks to the preferred route. (9)

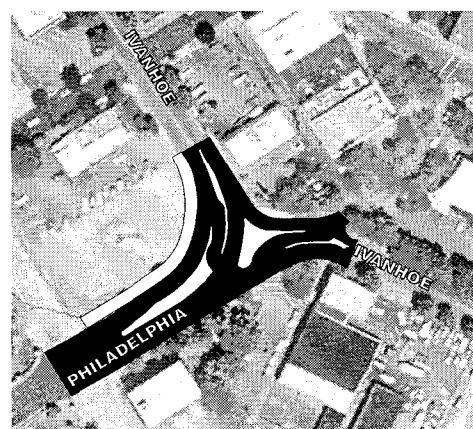


Make truck movement easier in places we want them to be. (19)

20. Reconfigure I-5 from 3 travel lanes in each direction to 2 travel lanes in each direction with 2 center reversible lanes. (A.1., Option F, pg 3, PSSP)
21. Redesign/rebuild intersection of Ivanhoe/Lombard/St. Louis to better accommodate the movement of trucks from Lombard to Ivanhoe, but restrict truck movement from St. Louis to Ivanhoe. (A.1., Option H, pg 4, PSSP)
22. Same as above, but remove no housing. (A.1., Option H, pg 4, PSSP)
23. Realign the Philadelphia/Ivanhoe intersection to favor movement between the St. Johns Bridge and Ivanhoe. (A.1., Option I, pg 5, PSSP)
24. Remove or replace pedestrian overcrossing on Columbia Blvd. at Midway. (A.1., Option J, pg 6, PSSP)
25. Replace bridge over the UPRR tracks at Lombard, east of T-4. (A.1., Option K, pg 6, PSSP)
26. Redesign N Burgard between Columbia Blvd. and Terminal 4 to better accommodate trucks. (A.1., Option L, pg 7, PSSP)
27. Remove the signal at Argyle St./Interstate Pl. to facilitate movement on Columbia. (A.1., Option M, pg 7, PSSP)
28. Provide an updated study of a T-4 access road, to identify access to the St. Johns Bridge with minimum impact to residential streets. (A.2., Option E, pg 8, PSSP)
29. Reduce or eliminate left turn movements to and from Columbia Blvd., or design turn pockets to limit long vehicle access. (A.3., Option A, pg 8, PSSP)
30. Add curb extensions, median islands, traffic circles, or roundabouts at intersections to limit access of long vehicles. (A.3., Option B, pg 8, PSSP)
31. Place restrictions on large trucks at Portland Road, Columbia, Portsmouth intersections to direct trucks to Columbia Boulevard for east-west movement. (A.3., Option B, pg 8 and C.1., A, pg 14, PSSP)
32. Add 22-foot (split) speed bumps on Neighborhood Collector Streets: Columbia Way, Fessenden, St. Louis. Modifies travel time, especially for longer and heavier vehicles. (A.3., Option C, pg 9, PSSP)
33. Add 22-foot speed bumps on non-emergency streets: Fessenden, Columbia Way, Oswego, Columbia Blvd., Smith. (A.3., Option C, pg 9, of SJTS, PSSP)
34. Change the design of Fessenden to discourage non-local trucks. (A.3., Options C-F, ppg 9 and 10, PSSP)
35. Reduce posted speed limits on Neighborhood Collector Streets: Fessenden and St. Louis. (A.3., Option D, pg 9, PSSP: request to ODOT)
36. Eliminate the right-turn only lane on westbound Columbia Way to northbound Fessenden. (A.3., Option E, pg 10, PSSP)
37. Change the appearance and function of certain streets by reducing the number of through lanes by adding left turn lanes, bike lanes and parking: Fessenden, St. Louis, Columbia Way, Macrum. (A.3., Option F, pg 11, PSSP)



Resign Lombard/st. Louis/Ivanhoe intersection for truck and pedestrian movement. (21/22)



Redesign Philadelphia/Ivanhoe to improve truck movement. (23)



Eliminate truck-attractive right-turn bay on Columbia Way to Fessenden. (36)

38. Change the allocation of roadway space on Philadelphia and the St. Johns Bridge to: two vehicle lanes and two bike lanes. (A.3., Option G, pg 11, PSSP)
39. Modify the existing truck route to have trucks turn off of Lombard to Ivanhoe at St. Johns, rather than St. Louis. (Policy consideration: A.3. Option I, pg 11, PSSP)
40. Enforce truck regulations, in concert with education of the trucking community. (A.3. Option J, pg 11, PSSP)
41. When the St. Johns Bridge is closed for repairs, the choice of detour routes should be analyzed for the possibility of designation of a permanent route or routes for trucks, not including the St. Johns Bridge. (A.3. Option K, pg 11, PSSP)
42. Redesign of N Portland/Marine Drive intersection to discourage use of N Portland Road. (A.3. Option L, pg 11, PSSP)
43. Survey Local Service Streets to alter the ability to speed for all vehicles, through use of 14-foot speed bumps. Some streets have already been evaluated for this option. (B.1., Option A, pg 12, PSSP)
44. Improve safety for pedestrians and bicylists at street crossings, through the use of medians, curb extensions, marked crosswalks, bike lanes, and landscaping. Intersections to consider have been identified. (C.1., Option A, pg 14, PSSP)
45. Include pedestrian/bicycle safety elements in any recommendation increasing truck movement along any of the above routes. (C.1., Option A and C, pg 14, PSSP)
46. Review current Tri-Met bus routes and locations of current bus stops, for safety and influence on the flow of traffic. (C.1., Option B, pg 14, PSSP)
47. Install bike lanes where possible on designated bike routes. (C.1., Option C, pg 14, PSSP)