

Examples of Comprehensive Plans that Contain Good Freight Components.

Most jurisdictions across the U.S. conduct comprehensive planning activities. New York, Oregon, Florida, Washington, Wisconsin, and California are well known for the innovative approaches to land use and planning, and for the depth of their comprehensive plans. Across the U.S. some jurisdictions are more proactive than others in assessing how planned development activities will impact the community.

COMPREHENSIVE PLANNING & NOISE ABATEMENT

California requires comprehensive planning (CA code 65103) by cities and counties that must include an assessment of how the zoning activities—if the plan is built-out—will create noise or vibration. Under California’s Government Code (Section 65300-65303.4), the state requires that each planning agency shall prepare and the legislative body of each county and city shall adopt a comprehensive, long-term general plan for the physical development of the county or city. Section 65302 notes that the general plan shall consist of and include a land use element that includes standards of population and building intensity as well as zoning ordinances to implement its provisions. California’s Regional Planning law notes that the state has a positive interest in the preparation and maintenance of a long-term general plan for the physical development of each of the state’s urban areas.

As an example, Solano County in California, in its 2008 General Plan Environmental Impact Report, ([Chapter 4 Noise](#)) reviewed the use of zoning elements, as well as unit design specifications, as it assessed elements required to abate projected noise increases. These included the use of setbacks, barriers, berms, and site design to reduce the effects of incompatible uses. The plan notes that buildings can be placed upon a site to shield other structures and reduce noise level caused by reflections—for example, carports or garages—or residential units placed to shield one another can be useful reduction measures close to transportation infrastructure. The plan also notes that site design should review options to use a commercial or storage zoning category between a noise source and a sensitive use area. Solano County also discussed the potential effects from freight rail activity and air transport activity in the Transportation Chapter ([Chapter 7](#)) of the General Plan.

The Cities of Portland OR, San Francisco CA, and Madison WI also have comprehensive plans that discuss freight in a critical manner and set out objectives and goals to achieve better freight land use coordination. New York has had a waterfront development plan in place for over twenty years that also provides a good conceptual view of how marine and port activities fit into the city’s economic base. Best practice items (often a specific section) from these comprehensive plans are depicted below.



SOLANO COUNTY, CALIFORNIA

RAIL SERVICES

Planning Context

Rail service in Solano County is provided by several rail lines. One line is a primary Union Pacific line that carries substantial amounts of freight between Bay Area ports and the rest of the country. Other smaller and spur lines also exist.

In addition, an existing passenger-service rail line, operated by Amtrak, runs through Solano County. The trains on this line offer both regional connectivity (Capitol Corridor) and national connectivity (California Zephyr and Coast Starlight). Capitol Corridor operations have increased significantly since 1997, and studies and proposals to add railway stations in Solano County and add service on the line are under way.

This potentially affects the unincorporated portion of Solano County in several ways, as described below.

Expansion of Rail Capacity. Because the rail corridor is already in high use for both freight and passenger service, there may be additional interest in adding tracks and possibly expanding the rail right-of-way.

Grade Separations. The proposal for additional rail service through the county will increase interest in constructing grade separations. The need for grade separations will depend on roadway volumes, train lengths and duration of blockage, and overall design and safety issues such as sight distance and speeds. New at-grade crossings of public roads are generally discouraged.

Compatibility with Surrounding Land Uses. Freight rail is often a mode that carries hazardous materials. The trains also sometimes move quickly and can be very difficult to stop. Land use proposals adjacent to rail tracks should consider the needs of rail operations for safety, speed, and reliability.

Implementation Programs

Funding, Physical Improvements, and Capital Projects

TC.I-15: Participate in programs to construct overpasses or underpasses at potentially dangerous and high-volume street locations that cross active railroad tracks.

Related Policy: TC.P-18

Agency/Department: Department of Resource Management

Funding Source: Federal and state funds

Time Frame: Ongoing

Coordination with Other Agencies and Organizations

TC.I-16: Support responsible improvements to track capacity so that both passenger and freight rail, including transportation of hazardous materials, can be operated without delays through Solano County.

Related Policies: TC.P-18, TC.P-19

Agency/Department: Department of Resource Management

Funding Source: Federal and state funds

Time Frame: Ongoing

PORTLAND, OREGON

Goal 5 – Economic Development: Foster a strong and diverse economy which provides a full range of employment and economic choices for individuals and families in all parts of the city.

POLICIES & OBJECTIVES:

5.1 Urban Development and Revitalization

Encourage investment in the development, redevelopment, rehabilitation and adaptive reuse of urban land and buildings for employment and housing opportunities.

Objectives:

- A.** Ensure that there are sufficient inventories of commercially and industrially-zoned, buildable land supplied with adequate levels of public and transportation services.
- B.** Support programs and policies which serve to maintain Downtown Portland and the Lloyd District as the major regional employment, cultural, business, and governmental center. Implement the Central City Plan and carry out the urban development goals of the Comprehensive Plan.
- C.** Retain industrial sanctuary zones and maximize use of infrastructure and intermodal transportation linkages with and within these areas.

5.2 Business Development

Sustain and support business development activities to retain, expand and recruit businesses.

Objectives:

- A.** Develop incentives for businesses to locate and stay in Council-designated target areas. Encourage Council-designated target industries to locate, stay and expand within the City, particularly in the target areas.
- B.** Incorporate economic considerations in long-range planning activities undertaken by the Bureau of Planning.
- C.** Advocate with Metro, Tri-Met, and other agencies conducting regional planning to consider economic concerns in their land use and transportation planning activities.

5.8 Diversity and Identity in Industrial Areas

Promote a variety of efficient, safe and attractive industrial sanctuary and mixed employment areas in Portland.

Objectives:

- A.** Recognize and promote the variety of industrial areas in Portland through development regulations which reflect the varied physical characteristics of the city's industrial areas. Distinguish between older developed areas and newer, less developed ones.
- B.** For each industrial zone, establish specific development requirements, while providing a mechanism to allow modification of the regulations when the proposed project design meets the purpose of the regulation.
- C.** Promote industrial parks by permitting increased development and use flexibility, after reviews to ensure that the purposes of industrial zoning regulations are met.

- D.** Within industrial districts, allow some lands designated for commercial or mixed employment. Provide for this while maintaining the overall industrial orientation of the districts.
- E.** Create mixed employment areas which encourage a broad range of employment opportunities by permitting a mix of industrial and commercial activities. Prevent land use conflicts within the mixed employment areas through the use of development standards and by limiting conflicting types of development.
- F.** For activities which tend to have substantial off-site impacts or demands on public services, limit the zones where they are permitted outright, and require additional reviews where they may be appropriate.
- G.** In determining allowable uses in zones, permit industrial activities outside of industrial sanctuaries when the activity, scale and physical development of the use are compatible with the intent of the base zone.

5.9 Protection of Non-industrial Lands

Protect non-industrial lands from the potential adverse impacts of industrial activities and development.

Objectives:

- A.** Where possible, use major natural or man-made features as boundaries and buffers for industrial areas.
- B.** When industrial zoned lands abut residential zoned lands, and there are no natural boundaries, apply special buffer overlay zone provisions to ensure that development is compatible.
- C.** Use off-site impact standards to ensure industrial activities will not cause nuisance effects on lands whose zoning permits residences.
- D.** Prevent hazardous conditions by ensuring that larger users of hazardous materials are located away from residential areas and that all users of hazardous materials meet applicable building, fire and other safety codes and regulations.

5.12 Guild's Lake Industrial Sanctuary Plan ⁷

Encourage the economic stability of the Guild's Lake Industrial Sanctuary, maintain its major public and private investments in multimodal infrastructure, protect its industrial lands and job base, and enhance its capacity to accommodate future industrial growth by including the Guild's Lake Industrial Sanctuary Plan as part of this Comprehensive Plan.

Goal 6 – Transportation: Develop a balanced, equitable, and efficient transportation system that provides a range of transportation choices; reinforces the livability of neighborhoods; supports a strong and diverse economy; reduces air, noise, and water pollution; and lessens reliance on the automobile while maintaining accessibility.

6.9 Freight Classification Descriptions ³

Designate a system of truck streets, railroad lines, and intermodal and other freight facilities that support local, national, and international distribution of goods and services.

Objectives:

A. Freight Districts

Freight Districts are intended to provide safe and convenient truck mobility and access in industrial and employment areas in areas serving high levels of truck traffic and to accommodate the needs of

intermodal freight movement.

- Land Use. Support locating industrial and employment land uses that rely on multimodal freight movement in Freight Districts.
- Function. Freight District streets provide local truck access and circulation to industrial and employment land uses.
- Connections. In Freight Districts, streets not classified as Regional Truckways or Priority Truck Streets are classified as Freight District streets. Freight District streets connect individual properties to Priority Truck Streets.
- Design. Freight Districts streets should be designed to facilitate the movement of all truck types and over-dimensional loads, as practicable.

B. Regional Truckways

Regional Truckways are intended to facilitate interregional and interstate movement of freight.

- Land Use. Support locating industrial and employment land uses with high levels of truck activity near Regional Truckway interchanges.
- Function. Provide for safe and efficient continuous-flow operation for trucks.
- Connections. Provide Regional Truckway interchanges that directly serve Freight Districts and connect to Priority Streets and other streets with high levels of truck activity.
- Design. Design Regional Truckways to be limited access facilities and to standards that facilitate the movement of all types of trucks.

C. Priority Truck Streets

Priority Truck Streets are intended to serve as the primary route for access and circulation in Freight Districts, and between Freight Districts and Regional Truckways.

- Land Use. Support locating industrial and employment uses that generate high truck activity on corridors served by Priority Truck Streets.
- Function. Priority Truck Streets accommodate high truck volumes and provide high-quality mobility and access.
- Connections. Priority Truck Streets connect Freight Districts to Regional Truckways.
- Design. Priority Truck Streets should be designed to facilitate the movement of all truck classes and over-dimensional loads, as practicable. Buffer adjacent residential uses from noise impacts, where warranted.

D. Major Truck Streets

Major Truck Streets are intended to serve as principal routes for trucks in a Transportation District.

- Land Use. Commercial and employment land uses that generate high levels of truck activity should locate along Major Truck Streets.
- Function. Major Truck Streets provide truck mobility within a Transportation District and access to commercial and employment land uses along the corridor.
- Connections. Major Truck Streets connect Transportation District-level truck trips to Regional Truckways. Trucks with no trip ends within a Transportation District should be discouraged from using Major Truck Streets.
- Design. Major Truck Streets should accommodate all truck types, as practicable.

E. Truck Access Streets

Truck Access Streets are intended to serve as an access and circulation route for delivery of goods and services to neighborhood-serving commercial and employment uses.

Land Use. Support locating commercial land uses that generate lower volumes of truck trips on Truck Access Streets.

- Function. Truck Access Streets should provide access and circulation to land uses within a Transportation District. Non-local truck trips are discouraged from using Truck Access Streets.

- **Connections.** Truck Access Streets should distribute truck trips from Major Truck Streets to neighborhood-serving destinations.
- **Design.** Design Truck Access Streets to accommodate truck needs in balance with other modal needs of the street.

F. Local Service Truck Streets

Local Service Truck Streets are intended to serve local truck circulation and access.

- **Land Use.** Local Service Truck Streets provide for goods and service delivery to individual commercial, employment, and residential locations outside of Freight Districts.
- **Function.** Local Service Truck Streets should provide local truck access and circulation only.
- **Connections.** All streets, outside of Freight Districts, not classified as Regional Truckways, Priority Truck Streets, Major Truck Streets, or Truck Access Streets are classified as Local Service Truck Streets. Local Service Truck Streets with a higher Traffic classification are the preferred routes for local access and circulation.
- **Design.** Local Service Truck Streets should give preference to accessing individual properties and the specific needs of property owners and residents along the street. Use of restrictive signage and operational accommodation are appropriate for Local Service Truck Streets

G. Railroad Main Lines

Railroad Main Lines transport freight cargo and passengers over long distances as part of a railway network.

H. Railroad Branch Lines

Railroad Branch Lines transport freight cargo over short distances on local rail lines that are not part of a rail network and distribute cargo to and from main line railroads.

I. Freight Facilities

Freight Facilities include the major marine, air, rail and pipeline terminals that facilitate the local, national, and international movement of freight.

Land Use and Transportation Policies:

6.17 Coordinate Land Use and Transportation

Implement the Comprehensive Plan Map and the 2040 Growth Concept through long-range transportation and land use planning and the development of efficient and effective transportation projects and programs.

6.18 Adequacy of Transportation Facilities

Ensure that amendments to the Comprehensive Plan (including goal exceptions and map amendments), zone changes, conditional uses, master plans, impact mitigation plans, and land use regulations that change allowed land uses are consistent with the identified function and capacity of, and adopted performance measures for, affected transportation facilities.

6.21 Right-of-Way Opportunities

Preserve existing rights-of-way unless there is no existing or future need for them, established street patterns will not be significantly interrupted, and the functional purposes of nearby streets will be maintained.

Objectives:

- A.** Evaluate opportunities and the existing and future need for a bikeway, walkway, or other transportation use when considering vacation of any right-of-way.
- B.** As a condition of street vacation, require pedestrian and bicycle facilities if needed, with first preference for dedicated right-of-way and, secondarily, through a public walkway and bikeway easement.
- C.** Acquire or control parcels of land that may be needed in the future for any transportation purpose

when the opportunity arises through sale, donation, or land use action.

D. Preserve existing and abandoned rail rights-of-way and examine their potential for future rail freight, passenger service, or recreational trail uses.

E. Consider the need for maintaining right-of-way for other infrastructure needs.

Freight, Terminals, and Truck Policies:

6.29 Multimodal Freight Systems⁵

Develop and maintain a multimodal freight transportation system for the safe, reliable and efficient movement of freight, within and through the City.

Objectives:

A. Support a well-integrated freight system that includes truck, rail, marine, air and pipeline modes as vital to a healthy economy.

B. Coordinate with private and public stakeholders to identify improvement and funding strategies for multimodal freight mobility needs.

C. Participate with interjurisdictional partners in the development of corridor plans, master plans, and regional facility plans that impact freight movement.

D. Address freight access and mobility needs when conducting multimodal transportation studies or designing transportation facilities.

E. Work with community stakeholders to minimize adverse impacts of freight activity on the environment and residential and mixed-use neighborhoods.

⁵ Amended

6.30 Truck Mobility⁶

Develop, manage, and maintain a safe, efficient, and reliable freight street network to serve Freight Districts, commercial areas, and neighborhoods.

Objectives:

A. Prioritize transportation investments in the freight street network that improve connections between Freight Districts and Regional Truckways.

B. Accommodate truck travel on designated truck streets through improvements to facility design and operations that address the dimensional needs of trucks.

C. Encourage through-truck traffic to use Regional Truckways, Priority Truck Streets, and Major Truck Streets for mobility and Truck Access Streets and Local Service Truck Streets to access local destinations.

D. Develop and implement street connectivity plans for Freight Districts to improve truck circulation and access to industrial land uses.

E. Develop and implement a signage plan for designated truck routes and major freight destinations.

F. Designate and maintain preferred routes to accommodate over-dimensional freight movement.

G. Employ intelligent transportation system measures to reduce delays and improve travel time on Regional Truckways, Priority Truck Streets and Major Truck Streets.

6.42 Truck Accessibility¹⁴

Improve truck access to and from intermodal freight facilities, industrial and commercial districts, and the regional freight system.

A. Evaluate and improve locations where inadequate roadway design creates barriers for truck access in Freight Districts and on designated truck streets.

B. Upgrade bridges to remove load limits and vertical clearance restrictions on designated truck streets.

C. Use public-private collaboration to identify and implement measures to minimize delays and improve safety at at-grade rail freight crossings.

D. Provide adequate off-street loading areas for larger employment, commercial and multi-family

developments.

E. Manage supply, operations, and demand of on-street truck loading spaces to ensure efficient, reliable and safe loading and unloading activities.

F. Implement design guidelines for truck streets that meet the dimensional needs of trucks, particularly for Freight Districts, while balancing the needs of other transportation modes in the right-of-way.



SAN FRANCISCO, CALIFORNIA

http://www.sf-planning.org/ftp/General_Plan/I2_Commerce_and_Industry.htm

I - ELEMENTS

COMMERCE & INDUSTRY ELEMENT

GENERAL/CITYWIDE

OBJECTIVE 1

MANAGE ECONOMIC GROWTH AND CHANGE TO ENSURE ENHANCEMENT OF THE TOTAL CITY LIVING AND WORKING ENVIRONMENT.

POLICY 1.3

Locate commercial and industrial activities according to a generalized commercial and industrial land use plan.

The following principles are integral and basic elements of citywide land use planning policy for commerce and industry.

1. The natural division of the city into two distinct functional areas—one primarily for production, distribution and services, and the other for residential purposes and the community facilities which are closely related to residential activities—should be recognized and encouraged.
2. A working population holding capacity should be established for the city based on desirable and feasible density standards.
3. The working areas of the city should be defined and designated in extent so as to increase the efficiency of each of the areas as a specialized center of management, production, service or distribution.
4. The working areas of the city should be related to the trafficways and transit systems so as to minimize time and distance in the journey to work from each of the community areas of the city and from within the San Francisco Bay Region.

Except in a few isolated instances the entire range of commercial and industrial activities of citywide importance is and should continue to be confined to the eastern flank of the city between the Bay and the first tier of hills rising west of the Bay. The types of use for which land should be allocated in the working areas are classified into four categories: 1) Downtown, 2) Business and Services, 3) Light Industry, and 4) General Industry.

The Downtown District contains the downtown shopping, entertainment and financial sections of the city as well as some of the downtown hotel quarters. Adjacent to this district is the primary

area devoted to and designated for Business Services. These are businesses and uses which supplement and are necessary to the total economy of the downtown area. The other designated uses are those light and general industries which occupy part of the harbor and occupy the flat land along the Bay shore of the city, primarily south of China Basin. The Plan indicates a transitional belt of light industry, between the general industrial section and residential sections in adjacent community areas.

POLICY 1.4

Establish commercial and industrial density limits as indicated in the Generalized Commercial and Industrial Density Plan map.

INDUSTRY

OBJECTIVE 4

IMPROVE THE VIABILITY OF EXISTING INDUSTRY IN THE CITY AND THE ATTRACTIVENESS OF THE CITY AS A LOCATION FOR NEW INDUSTRY.

POLICY 4.1

Maintain and enhance a favorable business climate in the city.

The creation and maintenance of a positive relationship between city government and private industry is an important factor for many industries in choosing to stay or relocate. A good business climate includes the feeling on the part of business that they have a "receptive ear" when they approach City government with a problem or request for assistance. One effective way of maintaining a positive business climate would be to improve the capability of City departments to intervene in situations of potential relocation and to coordinate City activities to respond to business needs. Intervention to assist businesses in staying in the City should only be done where the costs of doing so do not exceed the benefits to the city.

POLICY 4.2

Promote and attract those economic activities with potential benefit to the City.

Along with efforts to retain businesses, the City must attempt to attract new businesses to the city. It is likely that the City would have to undertake very costly measures such as major redevelopment combined with tax exemptions and subsidies in order to attract businesses for which a San Francisco location does not offer a comparative advantage. However, there are a number of economic activities for which the City does have a comparative advantage. Examples include the manufacturing of apparel and other textile products, small scale furniture manufacturers, commercial printing, communications companies, and business, medical and educational services. By concentrating attraction efforts on such enterprises the expenditure of the City's limited resources can be much more cost effective.

POLICY 4.3

Carefully consider public actions that displace existing viable industrial firms.

In some instances, public activities such as redevelopment efforts or public facility expansion or improvement can result in a physical displacement of a business. All too often when this occurs relocation is to a site outside the city. The City should recognize that many firms remain in the city primarily because of inertia, fixed investments in plant and equipment or excessive moving costs. These factors are overcome when public displacement occurs since moving costs and fair market value for land and facilities are paid by the City. Care should be taken to avoid unwarranted displacement. In determining the costs and benefits of the action causing displacement, the loss of taxes and jobs if the firm relocates outside the City should be looked at as costs.

POLICY 4.4

When displacement does occur, attempt to relocate desired firms within the city.

When the benefits of public actions justify dislocation, the City should seek to assist the displaced firm in obtaining a suitable alternative site in the city. This is particularly true if the situation is one in which the employment and tax revenues to the City outweigh costs to the City; it may well be appropriate to use public funds and redevelopment power to create a relocation site within the city for displaced firms.

POLICY 4.5

Control encroachment of incompatible land uses on viable industrial activity.

There are a small number of locations in the city which are a mixture of residential, commercial and industrial uses which were developed prior to modern zoning controls with separate uses. The South of Market area is a prime example. Such areas are resources of needed low cost housing and should be preserved and improved where feasible. Care should be taken, however, to permit residential expansion in a way that will not cause eventual large scale displacement of the existing viable businesses whenever feasible.

Another potential problem results from the proximity of the growing office core to smaller scale business and industries in the South of Market area. Growth of the downtown office core should be carefully guided to avoid unnecessary dislocation.

POLICY 4.6

Assist in the provision of available land for site expansion.

Although San Francisco has considerable amount of underused land available for industrial development, land is not always available in locations where new development is desired or feasible. A major problem facing many San Francisco industries is the lack of room for expansion. The cost of acquiring adjacent property, if it is developed, may be prohibitive to the firm. The initiation of small scale redevelopment activities to eliminate obsolescent and vacant buildings would allow land to become available for new development. Such actions might well prove financially beneficial to the city if vacant parcels and buildings could be utilized to

generate increased tax revenues. Formation of a land bank by selected parcels of land received by the City could aid industries beneficial to the city by providing a relocation resource.

POLICY 4.7

Improve public and private transportation to and from industrial areas.

The accessibility to a suitable labor force is a critical factor in determining industrial site location. The lack of adequate public transportation services to the industrial areas of the City dictate that blue-collar workers provide their own transportation. Consequently, the availability of parking spaces is a problem within many of the city's industrial areas, particularly in the South of Market area.

Many industrial areas are inadequately served by public transportation routes which also serve residential areas of the city. Therefore, the transit time from residential areas to the industrial activities is prohibitive. Improved transit service would make these residential areas more accessible to commuting workers and would also reduce the parking problems currently encountered in commercial and industrial areas.

In addition, some underdeveloped industrial areas are relatively isolated in terms of being able to move goods and services to and from them efficiently. Their development potential would be enhanced if transportation access from these areas to regional transportation linkages were improved. One of the advantages of the Southern Crossing would have been the improved regional access to the Southeastern section of the city. Other means — without the disadvantages of the Southern Crossing — should be sought.

MARITIME

OBJECTIVE 5

REALIZE SAN FRANCISCO'S FULL MARITIME POTENTIAL.

San Francisco began and has developed as a maritime City. Historically, the city offered great natural advantages as a port. Maritime activity stimulated the development of San Francisco as a commercial center of the West Coast and contributed as much to the special flavor of San Francisco.

The city has been a gateway to the West and the world beyond. The advents of rail, highway travel, air transportation and telecommunications have, however, increasingly lessened San Francisco's dependence on water-related activity.

Other Bay ports have matured and San Francisco has lost its preeminence as a port city, and much of its waterfront is under-utilized. However, the role of maritime activity in San Francisco's economy remains significant in terms of the jobs it offers to skilled and semi-skilled workers. In addition, most maritime activity offers the additional benefit of being a relatively

"clean" industrial activity; many of its potential adverse consequences, such as congestion and noise, can be overcome.

The prospects for strength and considerable growth in world and Bay Area maritime activity are optimistic. However, San Francisco is at a competitive disadvantage compared to the Port of Oakland and other west coast container ports. Dramatic changes in the cargo industry have led to the formation of alliances among carriers to cut transport time and costs, and increase operational efficiencies through shared use of facilities and cargo space. These industry trends favor those ports with vast terminal and backland space, access to large metropolitan markets and multiple rail lines, and which are in close proximity to shippers. In addition, intermodal container ports require massive capital improvement programs to provide facilities to accommodate larger ships and expanding cargo volumes, which far surpass the resources available to the Port of San Francisco. As a result of these industry developments, several shipping lines have eliminated calls to San Francisco, opting to use the more expansive facilities at the Port of Oakland, or terminating service to the Bay Area altogether.

The Port's existing terminals and cargo warehouses, while greatly underutilized in 1996, are attractive to breakbulk and other non-intermodal cargo carriers. The Port therefore is aggressively pursuing niche cargo businesses which do not rely heavily on freight rail transport or require major new capital improvements.

POLICY 5.1

Develop and implement a comprehensive long-range maritime development program for the port.

Cargo traffic through the Bay Area is expected to continue to grow at least through the year 2020. Ports which can offer the fastest movement of goods at the least cost will capture increasingly greater shares of this growth. In the past port development and expansion has been achieved by the aggressive and foresighted utilization of new technologies and techniques such as containerization, lighter aboard ship, roll on -roll off, mini- and maxi-bridge and automated dry-bulk feeders.

The Port should develop and carry out, and periodically update a comprehensive long-range maritime development program which assesses future cargo market demand, developing technologies which might be employed in San Francisco to meet the demand, taking into account geographic constraints and other factors affecting future intermodal cargo business opportunities, and land and capital investment which will be necessary to permit San Francisco to capture a reasonable share of the market.

POLICY 5.2

Focus investment on those port features in which San Francisco has a natural advantage. Create competitive advantages by providing more cost efficient freight handling facilities.

It is particularly important to focus limited resources on those areas in which San Francisco has a competitive advantage rather than to provide facilities to compete with other Bay ports for the same market. For example, San Francisco has had one of the greatest potentials for deep-water port development on the West Coast. However, due to its geographic constraint of being located at the end of a peninsula with limited freight rail access, the Port of San Francisco is unable to compete with the Port of Oakland and other west coast ports as an intermodal (ship-to-rail) container terminal operator. Furthermore, as ships become larger (and their hulls deeper) San Francisco's relatively deep water has become less of an advantage because dredging will be required more often, even in the deepest parts of the Port.

It may be possible in the future to create competitive advantages by anticipating future shipping needs and technologies which do not rely heavily on freight rail service, and by identifying niche cargo business opportunities which can capitalize on the Port's existing terminal, cargo warehouse and open storage yard facilities. Investments will necessarily be selective because funds will be limited. Investment strategy therefore should include an assessment of natural advantages and of the potential for increasing competitive advantages by use of advanced technologies.

POLICY 5.3

Aggressively market existing maritime facilities

Facilities such as the Port's breakbulk and other bulk cargo facilities, cargo warehouses and the North and South Container Terminals at Pier 80 and 94-96 are presently underutilized.

In light of the fact that the Port does not have the financial resources necessary to compete with larger intermodal container ports, it is important to maximize the return on existing maritime facilities. This will require continuation of aggressive promotional and marketing efforts especially in non-rail dependent cargoes such as breakbulk, and construction project cargoes. In addition, interim term leases for non-shipping operations should be sought until demand increases for shipping-related activities, enabling these existing facilities to be returned to maritime use.

POLICY 5.4

Avoid actions which may serve to displace desired existing maritime uses.

Historically, industrial maritime activity in San Francisco was principally located along the Northern Waterfront. Expansion of office and residential uses, and the pedestrian, public transit and roadway improvements newly constructed along The Embarcadero have resulted in increased pressure on cargo-related maritime uses in the Northern Waterfront area. This expansion should not be permitted to encroach on maritime areas designated in the Northeastern Waterfront Plan of the General Plan as long as maritime use remains feasible.

Available waterfront land is a limited resource and maritime activity remains vital to the City's economy. It should therefore have priority use of waterfront lands that it may realistically need to

survive. Specifically, piers in active maritime use should remain so unless it can be clearly established that the maritime use can be relocated elsewhere or will no longer continue operation on the waterfront and the area put to a more desirable use.

POLICY 5.5

Assure adequate funding for capital investments as well as operational expenses of the port.

Many major ports are subsidized in some form. Some receive tax overrides or have independent taxing authority. Others receive oil royalties or airport revenues. The Port of San Francisco does not benefit from outside revenue sources nor does it receive funding from the City. It has financed its operation and development since it came under local control by means of revenues received from leases on its property, and through Port revenue bonds. As the expense of repairing aging facilities and funding improvements for most maritime operations increases, the Port's costs will exceed its revenues unless the Port develops new revenue-generating uses on property which is surplus to maritime industry needs.

Both the capital investment necessary to improve the waterfront and the funds necessary for proper operation of existing facilities must be assured. Revenues from new development will enable the Port to underwrite the costs of maintaining, improving or expanding maritime facilities and public improvements (e.g. open space and public access), and meet its other Public Trust responsibilities. If sufficient revenues to meet Port needs are not forthcoming, some form of public subsidy should be provided. Although the City took over the Port from the State with the pledge that the Port would not go on the tax rolls, changed circumstances may necessitate and justify a modification of that commitment. Public funds spent to aid and enhance a port's operation can be an excellent investment by providing jobs and direct and indirect revenues.

POLICY 5.6

Foster the relation of maritime activity to other segments of San Francisco economy.

Many of San Francisco's commercial activities such as financing, warehousing, and import-export activities grew historically as a result of their close relationship to maritime trade. That link between national and international trade and San Francisco's economic health has not diminished to this day, though other modes of transport and communications have supplemented shipping.

Those who ship or receive cargo benefit from a port in closer proximity to their home office or ultimate point of delivery where inspections, drayage or deliveries are easier. Many service industries and offices serving maritime trades throughout the Bay area are located in San Francisco by historical precedent and benefit by a proximity of their customers or clients. This is a source of competitive advantage vis-a-vis other Bay Area and western ports and should be exploited.

POLICY 5.7

Restore the fishing industry in San Francisco.

Generations of visitors have been charmed and many tables graced by the San Francisco fishing fleet. The many restaurants and close residential areas created a significant market for their catch. Fishing has benefited San Francisco's economy as employer, retailer and as a part of the large and growing tourist industry.

In past years, the facilities for docking and fish processing deteriorated and the fleet diminished. Local unavailability of fish and the high cost of land and facilities in San Francisco had serious effects on the industry. However, the completion in 1995 of seismic repairs to Pier 45 and construction of state-of-the-art fish handling facilities are a major improvement for the industry. In addition, the Port plans to replace most existing berths with a new Hyde Street Fishing Harbor adjacent to Pier 45. These improvements will support and expand commercial fishing, fish processing and businesses which provide services to the fishing fleet in Fisherman's Wharf.

POLICY 5.9

Redevelop Hunters Point Shipyard to provide employment in the light-industrial, research & development, and cultural sectors, consistent with the Hunters Point Shipyard Redevelopment Plan.

The Hunters Point Shipyard Redevelopment Plan designates the location of planned land uses throughout the Shipyard. Land uses include a variety of light-industrial, research and development, cultural and educational uses, and mixed land uses. The Plan also includes residential and open space uses, discussed elsewhere in the Plan.

For specific policies governing Hunters Point Shipyard, see the Hunters Point Shipyard Redevelopment Plan and its accompanying Design for Development document.

POLICY 5.10

Increase cooperation among bay ports.

San Francisco has suffered in the recent competition with Oakland and to lesser extent other Bay Area ports. They have been better able to marshal requisite capital, land and rail services to take advantage of new technology. The Port of Oakland also has benefitted from quicker connections to eastern cargo destinations.

National and international shippers view the Bay Area as a single destination since times and rail links are the same. The economics of Bay Area communities are linked by workers and trade and could benefit by mutual cooperation. Bay Area ports should work to avoid unnecessary duplication of facilities and encourage each port to develop its own particular strengths. It may be that in the long run a single regional port agency will best serve everyone's interest.

POLICY 5.11

Pursue permitted non-maritime development on port properties.

The Port of San Francisco is the owner of more land along the waterfront than is needed for maritime use. Some of these properties, primarily, but not exclusively, the area from South Beach to Fisherman's Wharf, are suitable and attractive for residential, commercial or recreational uses.

In the past, non-maritime development on port properties, particularly development on piers over the water, has been plagued by community disagreement and by conflicting plans for the various public entities that must approve non-maritime development. The Northeastern Waterfront Plan which is part of the City's General Plan, was originally developed in the 1970's with the participation of diverse interests in the waterfront and endorsed by the Port Commission. This Plan, and the Central Waterfront Plan were revised in 1997 in conjunction with the Port's adoption of the Waterfront Land Use Plan, also created through an extensive community planning process. The land use policies contained in these documents are consistent with each other and will be the basis for conforming amendments to the Bay Conservation and Development Commission's Bay Plan and San Francisco Special Area Plan. Once the BCDC amendments are adopted, these plans will contain consistent policies regarding non-maritime development which will not usurp or conflict with maritime development and which will provide substantial revenues to the Port and the City while at the same time contributing to the environmental quality of the area. These opportunities should be vigorously pursued by the Port or some other agency on behalf of the Port to provide needed revenues for Port operations, development of the Port's maritime facilities, and public access and other amenities along the shore.



SEATTLE, WASHINGTON

Transportation Element

Promoting the Economy: Moving Goods & Services

Discussion

The transport of goods and services is critical to Seattle's and the region's economic development. As a major port city, Seattle's businesses and industries rely on rail, water, and truck transport. These policies, and those in the Economic Development and the Neighborhood Planning elements, support existing businesses and industries, and promote Seattle as a place for economic expansion. Major truck streets are an important part of the freight mobility network and are described in Section B – Make the Best Use of the Streets We Have to Move People and Goods, in this element. The Transportation Strategic Plan has more detailed strategies and street classifications that further support freight mobility in the City of Seattle.

Goals

TG19 Preserve and improve mobility and access for the transport of goods and services.

TG20 Maintain Seattle as the hub for regional goods movement and as a gateway to national and international suppliers and markets.

Policies

T47 Maintain a forum for the freight community to advise the City and other entities on an ongoing basis on topics of land-based freight transportation facility modifications and enhancements. Coordinate the review of potential operational changes, capital projects and regulations that may impact freight movement. Participate and

T48 Recognize the importance of the freight network to the city's economic health when making decisions that affect Major Truck streets as well as other parts of the region's roadway system. Complete Street improvements supporting freight mobility along with other modes of travel may be considered on Major Truck streets.

T49 Support efficient and safe movement of goods by rail where appropriate. Promote continued operation of freight rail lines and intermodal yards that serve industrial properties and the transport of goods. Improve the safety and operational conditions for freight rail transport at the rail track crossings within city streets.

T50 Promote an intermodal freight transportation strategy, including rail, truck, air and water transport and advocate for improved freight and goods movement. Work toward improved multi-modal connections among rail yards, industrial areas, airports, and regional roadways.

T51 Consider the needs for local delivery and collection of goods at businesses by truck when making street operational decisions and when developing and implementing projects and programs for highways, streets and bridges.

Land Use Element

Discussion

Seattle regulates the uses permitted in a land use category or zone so that adjacent uses and zones are appropriate neighbors. By defining the different uses that are permitted in an area, and the conditions under which they are permitted, Seattle's zoning creates different types of districts.

Policies

LU8 Allow or prohibit uses in each zone based on the intended function of the zone and the impacts the uses can be expected to have on the zone and the surrounding area.

LU9 Treat as conditional uses those activities having potentially severe impacts either because of the character of the surrounding area, or because the cumulative impacts of more than one such activity would be incompatible with the other permitted uses in the area.

LU10 In order to ensure that a wide range of housing opportunities are available to Seattle's current and future residents, generally permit residential uses in all zones, except in industrial zones and some shoreline areas, where residential uses may conflict with the intended industrial or water-dependent use of the area.

MADISON, WISCONSIN

Objectives and Policies for Freight Railroads

Objective 17: Maintain and improve freight rail access to the City of Madison and ensure safe street/rail corridor crossings. Ensure that the impacts of freight rail service on neighborhoods are minimized and mitigate existing impacts, as appropriate.

Policy 1: Provide, maintain and enhance freight railroad service in the City of Madison. Work to promote the redevelopment of existing industrial areas with industries that will use and benefit from existing freight railroad facilities. Within the development of new neighborhood development plans, locate freight - oriented businesses near existing railroad corridors, as a mechanism to enhance and broaden the economic development base in the City.

Policy 2: Work with trucking, rail, and air providers to investigate opportunities to enhance intermodal freight transportation (i.e., two or more freight transportation modes interacting together, such as semi - truck and rail).

Policy 3: Investigate changes in freight rail activity (or land uses adjacent to freight rail activity) in order to determine and mitigate potential negative impacts to adjacent residential areas. Rail and intermodal activities located in these locations should be moved to areas that are more compatible for freight activity, such as industrial areas of the City.

Policy 4: Work with WisDOT and the Federal Railroad Administration (FRA) to establish Quiet Zones throughout the City, where appropriate.

Note: Quiet Zones are federally designated corridors where specific railroad crossing safety measures have been installed (such as gates, lights and median barriers) and where train whistle blowing is prohibited. Quiet Zones are most appropriate in areas where noise from freight railroad activities is not compatible, such as residential areas and some types of commercial areas.

Policy 5: Monitor increases in rail activity and changes in street traffic volumes (for at - grade railroad street crossings), in order to evaluate and mitigate safety risks.

Policy 6: Work with the Wisconsin and Southern Railroad (WSOR) to consider policies that would encourage rail traffic to operate more during off - peak roadway travel times. Such a policy would minimize roadway traffic delays and improve safety conditions.

Policy 7: Consider the use of the railroad corridors for numerous transportation modes, such as passenger rail service, bus transit service, bicycle transportation, pedestrian transportation or other multi - use transportation functions.

Note: Work with Dane County, the Madison Area MPO and the University of Wisconsin to conduct an inventory of railroad corridors within the City and develop a long - range plan for their use. Preserve abandoned railroad right - of - way, where appropriate.

Objectives and Policies for Trucking

Objective 19: Provide truck routes for the safe and efficient movement of truck traffic within and through the City, in order to provide access to and serve the needs of Madison businesses. Minimize the negative impacts of trucks on existing and future residential neighborhoods.

Policy 1: Designate truck routes in a manner that directs trucks to destinations via the most appropriate roadways, while discouraging travel through residential areas where possible.

***Note:** Truck routes are most appropriate for arterials and collector roadways. Volume II, [Map 3-4 Truck Routes](#), at the end of this chapter, illustrates existing Madison area truck routes.*

Policy 2: Design and construct truck routes (and roads used to access industrial areas) to adequately accommodate heavy truck traffic.

Policy 3: Maintain and enforce ordinances that regulate and minimize negative noise and other impacts of trucking on residential neighborhoods, such as ordinances managing engine jake braking, truck delivery times and vehicle idling.

Policy 4: Work with trucking, rail and air interests to investigate opportunities to enhance intermodal freight transportation.



CHICAGO, ILLINOIS

[CMAP GOTO2040](#)

Regional Mobility

Create a More Efficient Freight Network

Metropolitan Chicago's freight system links us to the global economy. Nearly everything we buy as consumers must reach us by rail or truck, including the food we eat and the clothes we wear.

Our freight system delivers everything that local businesses need to thrive—from raw materials for manufacturing to office supplies. Without the freight system we would be shut off from the rest of the world.

But freight travel can negatively impact our communities as well. While the consumption of goods carried on our freight network creates jobs and boosts our economy, the movement of goods by truck and train can also increase congestion, add to air pollution, and hold up traffic at rail crossings. Freight bottlenecks caused by inadequate infrastructure make it harder for commuters to reach their destinations and for companies to get their goods into and out of our region—which hurts our economy. The region must balance this inherent tension so freight traffic can serve as an engine of economic prosperity with minimal impact on local communities. We must overcome the financial and institutional barriers that hamper freight improvements — such as the challenge of coordinating multiple private carriers within a competitive industry— while working together to produce both public and private benefits.

The increased investment in our freight system called for in GO TO 2040 will improve economic competitiveness by reducing travel delays and pollution and by improving safety. The private sector will fund some improvements through the normal course of business, but public investment is needed to promote economic growth as well as residents' health, safety, and welfare.

Our National Role Requires a Regional Voice

By any measure, our region is the nation's hub of rail and truck freight. Six of the nation's seven major railroads have large terminals here, with nearly 500 freight trains operating daily. But even more freight in our region moves by trucks, which carry about 1.5 billion tons of freight annually compared to 631 million tons by rail.



Despite being the leading U.S. freight center, metropolitan Chicago has not had a strong voice or a champion to look out for the public interest. National discussions and decisions about the movement of goods have traditionally been dominated by port cities and states.

The movement of goods is a regional issue more than a state one, and it is broader and more complex than a simple accumulation of the 284 municipal and seven county governments' individual interests. cmap and its partners need to address economic needs and freight efficiency while assuring that metropolitan Chicago remains a place where skilled workers want to live and where businesses want to grow.

RECOMMENDED ACTIONS

Complete CREATE

The regional and national significance of CREATE (Chicago Region Environmental and Transportation Efficiency Program) make it a high priority. This public-private partnership of the U.S. Department of Transportation, State of Illinois, City of Chicago, Metra, Amtrak, and the freight railroads should complete strategic upgrades of four critical corridors over the next two decades. Despite substantial progress with 10 projects completed to date, CREATE needs to prioritize the remaining 61 projects and aggressively secure funds to implement them.

Implement a National Vision

We need to resolve our freight pinch points, which are a problem that transcends geographical boundaries. To address these problems, the federal government needs to develop a vision, a plan, and funding to address freight movement across the nation. Once that has been developed, state, regional, and local actions will be needed to improve the efficiency of our freight system.

Improve the Truck System

To reduce congestion, improve safety, reduce emissions, and make deliveries to local suppliers more efficient, the region should pursue truck transportation improvements. These should include dedicated and managed truckways funded through a congestion pricing revenue stream, as well as an analysis and update of truck routes and restrictions.

Establish a Regional Freight Authority

The region should explore designating a self-financed Regional Freight Authority with a mandate to address freight issues. The Regional Freight Authority should have the ability to finance freight system capital improvements and address public policy challenges, including community issues like grade crossing delays, safety, and noise.

NEW YORK CITY - COMPREHENSIVE WATERFRONT PLAN

New York has had a comprehensive waterfront plan since 1992. This was the first comprehensive inventory of the city's entire waterfront area. The plan was to provide a framework to guide land use along the waterfront. Four functional categories were identified to frame the long-term land use decisions.

- 1- Natural Waterfront
- 2- Public Waterfront
- 3- Working Waterfront (water dependent maritime and industrial uses cluster, or where transportation and municipal facilities are dispersed).
- 4- Redeveloping Waterfront.

Four categories of working waterfront dependent uses were identified including maritime support and industrial, marine and marina support, transportation uses and municipal and utility uses.

Working waterfront goals are to:

- Retain sufficient waterfront land to accommodate existing, and attract future industrial, maritime, municipal and other working waterfront uses;
- Identify infrastructure improvements and other investments necessary to sustain those uses;
- Identify opportunities to encourage ferries, excursion boats, marinas and other water-dependent uses
- Encourage waterborne transportation of goods and people and maximize intermodal linkages
- Ensure that waterfront uses are developed in an environmentally sound manner; and
- Provide public access where appropriate and feasible.

Fundamental objectives of the waterfront plan were to facilitate and encourage uses, and to ensure the retention of sufficient manufacturing zoned land to accommodate future needs. The plan identifies infrastructure improvements necessary to sustain the working waterfront, opportunities to improve waterborne transportation of goods and people and, linkages from intermodal connections for air, rail, highways and water. Six significant maritime and industrial areas were identified in the original 1992 plan and designated areas to protect and encourage concentrated working waterfront uses.

- The Kill Van Kull in Staten Island from Howland Hook to Snug Harbor
- The Brooklyn waterfront from Erie Basin to Owls Head
- The Brooklyn waterfront from Pier 6 through the Red Hook Containerport
- The Brooklyn Navy Yard
- The Queens and Brooklyn shores of Newtown Creek
- The South Bronx (Port Morris and Hunts Point)



The plan also recognized the importance of airports to the local/regional economy and called for improvements to support air cargo facilities, including better ground access and waterborne transportation of goods.

The plan led to waterfront policies and regulatory changes that were implemented through the waterfront revitalization program and the waterfront zoning amendments in 1993.

The [Waterfront Plan](#) is currently being updated (2010) and can be accessed through the City's Website. The Waterfront Vision and Enhancement Strategy includes two core components. Vision 2020 New York City Comprehensive Waterfront Plan and New York City Waterfront Action Agenda. The first component will establish long-term goals for the next decade. The second component will create priority initiatives to be implemented over three years. Both these items will set the blueprint to balance competing critical uses and conservation.