

# Building castles in the air — An Air Rights “Under and Overview”

by Robert F. Peters

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*The multiple use of airspace and the transfer of air development rights has had a remarkable impact in the urban planning and redevelopment of cities across the country and around the world.*

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Robert Peters serves as Air Space Coordinator for the Washington State Department of Transportation. Bob, a member of Puget Sound Chapter 4, was recently awarded the 1985 AASHTO Presidents Modal Award for Highways for his work in increasing productive uses of highway rights of way through leasing.

Where editorial views may appear, they are those of the author and do not necessarily reflect the position or policies of WSDOT or others.

Only the surface has been scratched with respect to the potential for utilization of Airspace and Air Rights as tools in guiding urban development. New ways to take advantage of this “pie in the sky” are evolving across the country and around the world.

## **WSCTC Project — creative design provides social payoffs**

In Seattle, Bud Krogh, an attorney for the Washington State Convention & Trade Center (WSCTC), observed, “The WSCTC project constructed in large part in airspace over the Interstate 5 freeway and in airspace over adjacent land acquired by WSCTC, will be an outstanding example of innovative airspace use. On the roof of the convention center, as frosting on this complex layer cake, a public park is planned which will link up with Freeway Park, the award-winning

airspace park located directly to the south of the WSCTC project.”

Using highway right of way for the Center posed some unique design challenges. Robert Woelffer, Project Director for TRA (the designers), describes the two primary ones as designing a structure capable of spanning 170 feet across an operating freeway while supporting heavy floor loadings and constructing those spans with limited late-night traffic revisions and no freeway closures. TRA's freeway lid not only met these design challenges, enabling the Convention Center to be built in airspace, but also provided many benefits. These include a reduction in noise levels to surrounding residential neighborhoods and the creation of additional landscaped areas and downtown parks. The parks which double as pedestrian parkways rejoin city districts severed by construction of the freeway. Numerous social benefits are expected to arise from the Convention Center's reconnecting Seattle's First Hill residential and health care communities with its downtown retail and office core.

At least three other convention centers around the United States and Canada utilize airspace over transportation facilities: Two bridge city streets in Denver and Phoenix; the third in Montreal



Gateway Tower, Seattle, Washington

sits astride a depressed freeway, as will the Washington State facility.

## **WSDOT — other Interstate 5 developments**

The Washington State Department of Transportation (WSDOT) has granted a lease option for rights over Seattle's reversible Cherry Street Ramps adjacent to Interstate 5. The site will be used for the construction of the proposed 62-story Gateway Tower project now in the marketing phase. When construction is accomplished, the ramps will be enclosed by the building and remain operational.

Also in Seattle, the DOT has utilized its own highway airspace under I-5 at the Spokane Street Interchange for a new maintenance facility. The significant cost of acquiring new land was eliminated and the lower ramps shelter stored materials. Visual impact on the freeway is minimal.

## **Copley Place, Boston — in contention for ASCE national award**

In Boston, Copley (Käp' lē) Place, an innovative \$550 million hotel-office-retail complex, was built in 1984-85 over 9.5 acres of formerly vacant land over and around the Massachusetts Turnpike and railroad tracks adjacent to historic

Copley Square. It is the first airspace project to be located over a freeway interchange and serves to mend a tear in the urban fabric caused by construction of the turnpike in the early 1960's.

The architecturally sensitive project complements the square and includes 300,000 square feet of retail space for such key retail tenants as Neiman-Marcus, Gucci and Tiffany. Westin and Marriott have opened major hotels on the site with 800 and 1,100 rooms, respectively, and Mr. David Nagle of the Massachusetts Turnpike Authority, remarked that they are usually 80 percent occupied. The project also includes 800,000 square feet of office space and 100 units of housing, 25 of which are low income. The project has created an estimated 6,000 new jobs.

Copley Place represents a partnership between the developer, the City of Boston and the Commonwealth of Massachusetts. Such projects involving various agencies and the public are complex. Although the Copley Place project initially was received with hostility by some of its neighbors, the response was not entirely negative. By channelling the neighborhood's constructive input and environmental concerns through an unprecedented effort, what was initially shaping up as a battle for airspace comparable to that for the "Battle for Britain" became a very positive process. The developer's architects worked with citizen-offered guidelines — developed from over 200 meetings — tacked up over their desks. The developer has said that far from ruining the project, neighborhood input led to an economically and aesthetically superior development; and obtaining full neighborhood approval cut the approval process from an anticipated 6-7 years to a year and a half. Nagle further states that the city, state and Turnpike Authority are all "extremely pleased" with this project. Maartin Henkes, speaking for Zaldastani Associates, consulting engineers, commented that the project is being considered for a national award by ASCE (American Society of Civil Engineers).

#### **FHWA policy encourages air rights development**

According to E. J. "Skip" Zelasko, Washington D.C.-based Chief of the Federal Highway Administration's Acquisition and Special Programs Office,

California and Washington State lead the nation in utilization of airspace related to highways acquired with Federal Aid highway funds.

At this time, most highway airspace use around the country involves land under viaducts, and most of that goes for parking. Uses such as housing within freeway rights of way are falling into disfavor for numerous reasons, including residents' prolonged exposure to noise and air pollution.

FHWA recently issued a new policy stating that as of October 1, 1986, revenue derived from airspace activity is to be used by the states for the highway program. Further, the same memorandum requires FHWA administrators to "actively encourage" air rights development and marketing, and offer technical assistance to states engaged in such activities.

While this policy may require legislation in states not having a highway trust fund such as Washington State's, it may serve as an incentive to highway departments across the country to begin considering proposals to develop airspace where the potential exists. Up to now, many highway agencies have been lukewarm to expending budgeted agency funds to develop an income stream which did not directly benefit their programs. Further, in the case of many public agencies, this supplemental lease revenue may prove to be more stable

over the long term than some other sources.

#### **Joint private and public development and use of airspace yields impressive economic benefits**

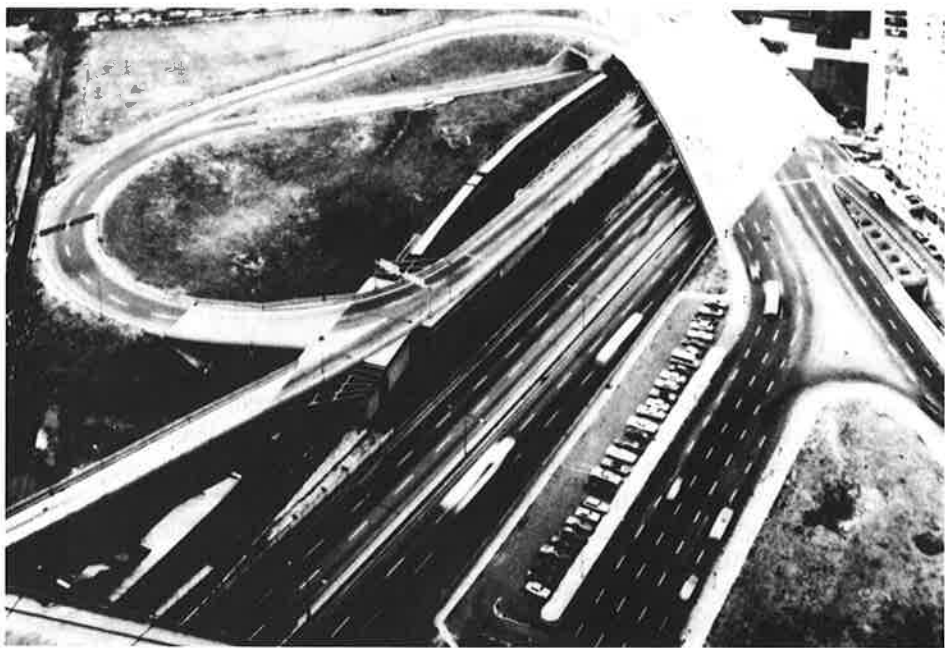
"Piggybacking" of private uses over and/or under public lands offer economic benefits in addition to rental income. In Washington State, for example, an "in lieu of real estate" tax, currently 12.84 percent of contract rent, has the effect of placing leased public lands back on the tax rolls.

Rental of under-utilized space over or under highways, public bus, rail or marine transportation terminals can be used to offset at least some acquisition, construction and/or operations costs. In addition, the increased public use of these airspace developments for shops, restaurants and similar activities may decrease crime rates, increase ridership of the transit mode, and add sparkle and zest to terminal facilities and to the neighborhoods they serve. And increased utilization creates new jobs. Where the potential for joint development exists, the additional benefit of the "1 + 1 = 3 effect" may be realized. In other words, an agency and one or more developers, or two or more agencies sharing costs can together build a better product than could any of the parties independently.



*WSCTC Looking North 8th Avenue Penetrates building.*

*Photo by TRA Assoc.*



*Site of Boston's Copley Place before it was rebuilt.*

*Photo by Zaldastani Assoc.*



*Boston's Copley Place, after about 10 acres of new land was rebuilt and utilized.*

*Photo by Zaldastani Assoc.*

In Washington D.C., the Metropolitan Transit Authority (MTA) has leased airspace over underground transit terminals to private developers. The six mixed-use projects generate almost \$2 million annually for MTA's operating fund. In Denver, the Regional Transportation District (RTD) has leased air rights over its downtown transit facility for \$400,000 annually for the first 15 years, plus 38 percent of the developer's profit. As is often common in the marketplace,

RTD will own the 600,000 square foot office building when the lease expires.

#### **"The Vasaterminalen" — Sweden's ambitious development of airspace to serve as gateway to Stockholm**

In Stockholm, Sweden, almost a million square feet of "new land" is being created over the Central Station Railway. The "Vasaterminalen" will serve as an ultra-modern gateway to the city and as a multi-mode terminal for Gotland

bus traffic, rail traffic, and as the main downtown terminal for the Arlanda Airport. The project will feature 100,000 square feet of movable vaulted glass ceilings, a four block mid-rise office complex and space for 40 bus lanes.

#### **Transfers of air rights play innovative role in urban planning and redevelopment Seattle**

Transfers of air rights from one property to another are preserving historic or landmark buildings in Seattle as well as in New York, Chicago and San Francisco. Buildings which would otherwise be razed as uneconomic and functionally obsolescent are enjoying an assured future.

In Seattle, McCormick's Restaurant exemplifies an "under-built" property — a property with a building of less volume (a "surplus" of development rights) than the maximum allowed by ordinance. According to Rich Yukubousky, Director of Seattle's Land Use and Transportation Project, these surplus rights from property upon which McCormick's Restaurant is sited were transferred to the new 76-story Seafirst Columbia Center, in part enabling the super high rise structure. The rent derived from such a "functionally obsolescent" building, together with the income from the lease of air rights over the building for use in a project on abutting land (Transfer of Development Rights or TDR's), makes retention of the otherwise uneconomic building or use feasible.

Today the McCormick project could not have been accomplished because the building has not been designated a landmark and under Seattle's new ordinance relating to TDR's for historic preservation, such a transfer can be used to preserve only designated landmarks. Other transfers under Seattle's pioneer new ordinance are aimed at preserving low income housing downtown. "The areas where transfer now can occur in Seattle are more liberal, but the uses are more restrictive under the new ordinance," according to Yukubousky.

#### **New York City**

In New York City, the Museum of Modern Art disposed of its air rights and will coexist with a 52-story residential tower overhead. Other New York museums are planning similar air rights projects to raise funds.

In a similar plan initiated in 1966, the New York City Educational Construction Fund, a combined city-state organization, built a package of 13 new schools at no cost to taxpayers through innovative disposition of air rights. The first project in the Bronx was a 28-story tower. The school's needs required the first three stories. The overhead rights to 25 floors of apartments were leased to a private developer. The revenue paid for the school and left a surplus for deposit in a revolving fund to be used for additional projects in the package. Entrances on separate streets, buffering and other architectural considerations minimized incompatibility. Instead of riding in a school bus, many of the students in this building ride to school in an elevator. Two of the projects were for office buildings, 11 were for apartments. Three more projects are planned for the near future. Mr. Sydney Mazur (Mā'zér) of the Educational Construction Fund states that the successful concept has been adopted by Germany, Sweden, and France and is being considered for implementation by Tokyo, Japan.

Cities can use TDR's and closely related bonuses as a tool to accomplish desirable civic goals in addition to historic preservation. In New York City, the Cityspire Tower could have been built only to a height of 34 stories. But New York's ordinance allows a developer a 20 percent increase in the size of his project for providing one of certain specified public amenities: for instance, renovating a subway station is good for 20 percent, building a public plaza, also 20 percent. The developer renovated the adjacent landmark City Center Theater and bought the development rights over it for transfer to his tower. The right to construct 26 more floors was secured by a \$3 million contribution to the New York City Ballet! With air rights and bonuses, 72 stories were allowed.

Air rights over Grand Central Terminal were sold for transfer to a nearby site at 383 Madison Avenue. With these TDR's and bonuses, the site may support a mind boggling 140-story structure and Grand Central will be preserved as a landmark "cathedral" of transportation.

### Future Prospects

What of the future? Expect to see at least appropriate sections of urban freeways and transportation facilities



*McCormick's Restaurant, Columbia Center, Sacramento*

designed in anticipation of multiple use of their airspace. Freeway lanes may be located to permit column spacing favoring shorter, economic spans. Expect to see developers coordinating closely with transportation/transit agencies and municipalities during design and construction of facilities. This approach will lead to new urban highways and transit facilities with a reduction in some of the negative impacts associated with such facilities, and with a reduced overall operating cost.

Cities will be required to reexamine their zoning plans recognizing that rights of way for freeways, railroads and perhaps even some utilities may be developable space, and they must prepare to deal with all related issues.

Regions coming under pressure of development may increasingly acquire rural development rights for the public as an equitable means of preserving farmlands, greenbelts and open space forming their periphery.

Nationally, watch for ever more creative and mutually beneficial "horse trading" between cities and developers — civic concessions in exchange for the municipality's permitting larger and more profitable projects.

In today's world, governmental bodies, developers and municipalities across the country are informing themselves of the potential for creative use of air rights and airspace and are watching to take advantage of opportunities as they arise. It's an exciting new field, it's

in the public interest, it's here, and it's now! **IRWA**

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