By definition, property management is managing and administering property acquired for highway purposes so that the public interest is served. This property is often called *airspace* and is defined as that space located above, at, or below the highway's established grade line, lying within the approved right-of-way (ROW) limits and includes air rights under and over highway structures and over sections of highway as well as surface rights of any ROW located away from the traveled way improvements.

The Federal Highway Administration (FHWA) regulation for the property management function is found in 23 CFR 710 subpart D. This regulation prescribes the FHWA policies and procedures for the management of real property acquired in connection with Federal-aid transportation projects. These policies apply to all state and political subdivisions that manage real property acquired for any transportation or transportation related projects in which the FHWA participated in any part of the ROW cost of the project.

The FHWA participation in property management is set out in 23 CFR 710.203(b) (4). The FHWA may participate in net costs incurred in leasing, rental, maintenance, disposal of improvements, protection, rodent control, and clearance of real property. Clearly the key is flexibility in managing or removing structures from the ROW.

State Departments of Transportation (DOTs) are required to have property management policies and procedures that ensure adequate control and effective administration of lands and improvements acquired for ROW purposes. These policies are to be contained in its ROW procedures manual. The control and administration of acquired property includes:

- Property records which show:
  1. An inventory of all improvements acquired as part of the transportation project;
  2. An accounting of the property management expenses and the rental payments received; and
3. An accounting of the disposition of improvements and the recovery payments received.

- Methods for accomplishing the clearing of ROW when such clearance is performed separately from the contract for the physical construction of the project.
- The methods for managing the rodent control program.
- The methods for employing private firms or public agencies for the management of real property.
- Methods for accomplishing the disposition of improvements through resale, salvage, owner retention or other means.

The acquiring agency responsible for property management must handle such activities in a manner consistent with Federal and state requirements. Its policies and procedures should be designed to reflect the maximum long range public benefit.

Just as any privately operated property management firm, the acquiring agency is responsible for the preservation of improvements and for reasonable safety measures relative to the preservation of the acquired property and protection of lawful occupants when it has acquired ownership and possession of property.

12.1. PROPERTY MANAGEMENT DURING THE ACQUISITION PHASE

There are several areas in which the property management section should be involved during the acquisition phase of the project, i.e., before the project is ready to be built. The most basic function of property management during this phase of a project is the clearance of the acquired ROW. This not only means the vacation and removal of structures and other improvements (e.g. utilities, wells, etc.), but also the removal of pests and hazardous materials that are in the way of constructing the project. Clearance of the ROW may include clearing and grubbing, which is the removal of all vegetation and the preparation for grading. The scope of property management during the acquisition phase of a project may vary from project to project and will be governed by state procedures and policies.

12.1.1. ACQUISITION PHASE PROJECT CLEARANCE CONTRACTS

Disposing of acquired improvements under a clearing contract may be considered a ROW item when the clearing is performed separately from the contract for physical construction. On some projects, it will be more expedient to contract for ROW clearance separately from the construction contract because of the size of the project, the large number of improvements to be removed, and the length of time between the acquisition of the improvements and the beginning of construction of the project. Contracts for demolition that are billed as a ROW item are handled much the same as a construction contract. The major difference between billing as a
ROW item and demolition as part of the construction contract is that if handled as a ROW item, the contract does not have to be authorized separately as does a construction contract. See Chapter 4 for contracting requirements. Such contracts must conform to the provisions of 49 CFR 18.36.

12.1.2. ACQUISITION PHASE INVENTORIES

Planning for property management can begin with the receipt of appraisals of the property to be acquired or even earlier. An inventory of the property acquired for the project is required by Federal regulations, the format of which is an acquiring agency responsibility. Also, the inventory must be kept up-to-date. Procedures established to develop and maintain an inventory are essential to any effective property management program. Computer application in this area is recommended.

12.1.3. ACQUISITION PHASE RODENT CONTROL

Rodent control is an area where early involvement by the acquiring agency can make an impact on the success or failure of the activity. Implementation of an effective plan should start not later than the relocation of the first occupant on the project. To be effective in controlling pests and rodents means that you must be ready to begin treatment as soon as the occupant vacates the structure.

Before demolition or removal of acquired improvements is undertaken, rodent control measures must be initiated, if necessary. Rodent control measures are necessary if evidence exists of rodent infestation of the acquired improvements. The need for rodent control measures must be documented by periodic inspection of the improvements to determine if it is necessary to provide for rodent control. If the acquiring agency does not have the expertise to conduct a qualified inspection, a private firm or other state or local agency that is qualified to conduct such inspections should be used. Each inspection must be documented in the parcel's files. Rodent control measures should be coordinated with interested agencies such as state and local health agencies.

If procedures call for staff personnel to do the job, the appropriate materials and know how to effectively utilize them must be on hand. Often, to be effective, treatment must go beyond the ROW limits. This requires working with adjacent property owners and the local jurisdiction to effectively control the rodents.

Using contracts for rodent control is an appropriate property management expense. Contracts can be by parcel or project. When use of a contractor is anticipated, provision should be made prior to the first occupant leaving the project. For such a contract to be timely, advertising 3 to 4 weeks into the acquisition stage of the project may be necessary. Provisions for adding or deleting parcels to the contract may be necessary if it is a project contract or an area wide contract. If a project is large or a district is very active, another method of contracting for this service might be on an annual basis.

Reimbursement provisions should be established ahead of time to provide for adding parcels or
canceling the contract if performance is not satisfactory. The contract should contain equal opportunity provisions. The cost of doing the work, when necessary, should also have performance bonds to assure that the work is completed.

Utilization of local government inspectors and health teams is another option. This may require an inter-agency agreement and involve reimbursement of costs to the agency providing the service. This option may be less expensive than hiring a contractor but less service may be available.

12.1.4. ACQUISITION PHASE IMPROVEMENT SECURITY

The acquiring agency is responsible for the preservation of the improvements and for reasonable safety measures when it has acquired ownership and possession of the property. Acquired ROW must be maintained in a manner which will prevent, minimize, or correct problems such as illegal dumping, or disposal of rubble and debris on cleared ROW until needed for construction.

Where the acquired ROW includes areas for future construction, the acquiring agency should consider permitting or leasing the use of such area until it is needed for highway purposes.

Vandalism and dumping on the ROW are almost impossible to stop. However, acquiring agencies make an effort to prevent these activities. Many things have been tried around the country-

- fence the ROW
- sell the improvements immediately
- hire security personnel
- coordinate with the local law enforcement agency
- get the community involved

All of these have been tried with varying degrees of success. Some of these attempts can amount to a fairly large expense. An analysis of the problems anticipated and options available prior to the first acquisition on the project will prepare the acquiring agency to proceed with security without undue delay.

SOLUTIONS

12.1.5. ACQUISITION PHASE RENTAL PROCESS
Leases during the acquisition phase of a project are generally dictated by the anticipated advertising date for the project. The tenants will either be persons who occupied the property at the time it was acquired, or persons selected as tenants by the acquiring agency after acquisition. Those persons in occupancy when the acquisition was completed are displaced persons under the relocation program and the rental process should be coordinated with that process.

Persons who first come into occupancy following the acquisition do not meet the definition of a displaced person as set forth in 49 CFR 24.2. The lease agreement with these persons should include a provision acknowledging that the occupancy does not create an entitlement to relocation assistance upon termination of the occupancy.

12.1.5.1. ACQUISITION PHASE ESTABLISHMENT OF RENTAL RATES

Basically, there are two types of tenants who rent property acquired for highway purposes. The first type is the short term occupier and usually involves the renting back of the acquired property to the original occupant. The short term occupier is accommodated in Section 301(6) of the Uniform Act which says that rent charged to the short term occupier shall not exceed fair rental value. In these cases, the rent will normally be less than the current fair market rent. The period of free occupancy and the rental rate to the short term occupier is negotiable. If the property is not needed for a few months before the construction bids are advertised, then it is normally advantageous to the agency to have the property occupied in order to prevent vandalism and to prevent an unsightly appearance of the community. Coordination with the appraisal section to determine the fair market rental amount to be charged may be necessary. A rent to be collected that is less than the fair market rent should be explained. Extended free occupancy or a reduced rent may be considered an administrative settlement which would require justification as described in chapter 11. There may be political considerations, timing of the project, individual hardship and the like which may influence the free occupancy period and/or the amount of rent to be collected.

There can, however, be problems with relocation when property is rented back to the original occupant. Per 24.203, displaced occupants have a right to receive a relocation housing payment based on decent, safe, and sanitary housing at the time they are given notice to move. As a result, payments must be re-computed at the time of the notice to vacate. Sometimes a relocation problem is affected by the length of time the property is rented to the original occupant. It is usually preferable that the original occupant is expeditiously relocated after acquisition of the property.
The second type of rental is to the subsequent long term occupant. These rentals should be based on the current fair market rental value. We suggest that the property manager inspect these properties at least annually and evaluate the FMV rent as the lease term dictates. Often this type of tenant occupies state owned property that was acquired far in advance of the actual construction date or is on projects that have been postponed or canceled.

The current fair market rent to be charged to the long term occupant can be determined by an analysis of the rental rates on similar properties in the area. Coordination with the appraiser/review appraiser or relocation agent may be helpful because he or she may have sufficient data already available. As properties that are occupied by residential tenants are acquired for the project, the agent computes a rental assistance payment for them, thus developing useful rental information. Use of the multiple listing services, prior highway projects in the area and trends in the industry may also be helpful.

12.1.5.2. ACQUISITION PHASE TENANT SELECTION

An important consideration concerning the rental process is the selection of the tenant. If you are dealing with the original occupant, there is little choice. However, should a short term occupier other than the original occupant lease the property, as much information as necessary to determine whether or not they have the ability and the character to abide by the terms of the lease should be obtained. When analyzing the available information on a tenant applicant, the property manager needs to be a good judge of people. Even though the rent may be nominal for the short term lease applicant, the agency receives a benefit by keeping the property occupied which is a protection for the acquired property. It is essential that any short term occupant understand the terms and conditions of the occupancy.

12.1.5.3. ACQUISITION PHASE LEASE AGREEMENTS

The selection of a tenant as a long term occupier should involve a screening process. The ability of the prospective tenant to pay the rent to be charged should be among some of the concerns when attempting to find a quality tenant. In some instances it may be worthwhile to obtain a financial statement and run a credit check (the cost of which may be paid by the tenant applicant). This cost is also eligible for Federal-aid reimbursement. It is usually helpful to check employer as well as previous landlord references.

Most states have standard leasing forms and many states are self insured for property insurance. You should be assured that, prior to allowing a tenant to move into property

- Some states provide for payments to be mailed to the accounting branch; others provide for payment to be made at the district offices where receipts may be handed out.
- Receipt books should be in triplicate: (1) tenant, (2) accounting, and (3) for the office receiving the money or check.
- Any agreements entered into should indicate where payment is to be made.
- Some states have found that rent collection remains high where self-
acquired for a project, the prospective occupant has personal liability insurance. It is also important that a certain amount of self-protection be built into the lease agreement with regard to the collection of rent.

- Other states have also found greater non-delinquency when utilizing mass mailing of rent payment due reminders.

## PAYMENTS AND RECEIPTS

12.1.5.4. ACQUISITION PHASE MAINTENANCE AGREEMENTS

Maintenance agreements are either contracts or written agreements between the owner of the property (in this instance the state or acquiring agency) and a person or firm who agrees to maintain the property. The scope of maintenance to be performed spans the entire spectrum of levels of maintenance. To a large extent, the level of maintenance will be based on four primary considerations:

1. **Type of structure**
   All types of structures are acquired for highway projects but some are more conducive to being rented than others. Obviously, a magnificent church building may be able to be rented back to the church but it may not be easily rented to a non-church type entity. Commercial type structures generally are more likely to be leased back to the original occupant because businesses take more time to relocate. It is unusual to find a healthy business willing to move into a facility on a short term basis as the move into and out of a structure may not be worth the cost. Loss of patronage and good will are other factors against a business moving into a short term lease arrangement. Residential structures are the easiest to lease. Individuals and families are easier to relocate on short notice.

2. **Age and condition of the structure**
   Generally, the older the structure the more maintenance will be required. As such, costs associated with maintaining each structure or property, as applicable, should be kept on file. Assuming a structure is in fair or better condition and marketable as a rental property, the cost of expected maintenance required should be measured against the amount of rent expected to be collected. A maintenance agreement with a commercial property manager for a single family residence may not be feasible. On the other hand a commercial structure which will generate a high rent with a tenant who is willing to perform all necessary maintenance would be highly advantageous to the agency. A negative or marginal cash flow should eliminate a property from consideration as one to be rented.

3. **Term of the lease**
   The length of time the property is expected to be rentable is another factor in the decision to rent a property. The longer the time between its acquisition and its need by the project, the more feasible the leasing of a property becomes. If a property is likely to be rented for several years, and its type and condition make it conducive to rent, then the decision to be
made concerns the maintenance issue. The longer the term of the lease, the more desirable it will be to have the property professionally maintained, even if on a periodic basis.

4. **Ability of the tenant to provide maintenance**
   Depending on the type of structure, some tenants are more capable of providing maintenance than others, thereby reducing maintenance costs and improving profitability. On the other hand, it may be more desirable to charge a higher rent which would include maintenance considerations.

There are four ways to maintain property:

1. **State forces**
   Utilization of state forces to maintain property is usually a cost effective method if the manpower is available. A basic level of "heavy" maintenance can be provided while keeping the rent competitive. This is usually a good method to use in combination with tenant maintenance.

2. **Commercial managers**
   Property management firms can provide the complete scope of property maintenance services. Depending on the four primary considerations described above, services can be contracted for which would provide everything from daily janitorial services to periodic systems maintenance.

3. **Tenant maintenance**
   Allowing the tenant to maintain the premises is the most cost effective way of maintaining a property. However, there are risks associated with this method. The primary risk is the delaying of required or necessary maintenance. The next risk is the quality of maintenance conducted. If a tenant was allowed a reduced rent in exchange for maintenance of the premises, and the agreed upon level of maintenance was not conducted, the agency may be left with a structure that may be unrentable thereby denying the agency potential rental income. Leases can be structured to account for these risks and others. Obtain legal review of all lease documents prior to ratification.

4. **Combination**
   Utilization of a combination of the above listed methods can be another cost effective way of dealing with required maintenance. There are many options available which would generate positive cash flow while adequately maintaining the acquired property. The specific combination of methods and the degree to which they are employed will determine the feasibility of renting a property.

### 12.1.5.5. ACQUISITION PHASE OWNER RETENTION

One of the easiest methods of disposing of improvements located on lands necessary for highway purposes is through owner retention. In order for this to be a viable means of improvement removal, the property manager needs to know the number of potential improvements which can be moved on the project. To accomplish this, an inventory of these structures should be conducted based on information contained in the appraisal reports of the properties. Also, the property manager should be knowledgeable of local codes and whether it is possible to move any of the inventoried improvements over public streets. If possible, he or she should know which streets would be allowed to be used. The property manager should, early in the project, determine
if there is or will be available remainder lands or other available lots which could be purchased for the placement of these structures. This is important since availability of lots may determine the feasibility of making the offer of retention to the owner.

The acquisition agent and a property management agent need to communicate with each other to assure that the owner of improvements is made aware of his option for retaining improvements. The acquisition brochure may be one place where this information can be included for the benefit of the property owner.

Owner retention may be for all the improvements on a parcel or it may be for only some of the improvements. When retention and movement of a structure is possible and is in the public interest, lower project costs should be expected when the owner retains the structure rather than if it is demolished. A good inventory will keep acquisition agents advised and knowledgeable. The inventory may also aid in determining retention value, and assist in deciding when to make the retention offer.

When it is known that the greatest return is from the sale of the entire improvement, it may be advantageous to offer the retention option early in the negotiations process. One thing the acquiring agent should always do is to advise or make sure that the owner is aware of what the state is acquiring (what the property owner is conveying to the state or acquiring agency) and that when possession is given to the acquiring agency, all items are expected to be turned over in as good condition as when the offer was made, less normal wear and tear.

Remember that the Uniform Act requires fairness to both the state and to the property owner. The basis for retention values should be documented in the parcel file as to where the retention values originated, i.e., public sale, sales by other agencies, private sales in the community, trade publications, etc.

Owner retention can result in good public relations as an example of the acquiring agency's willingness to work with the owner and the community through which the highway is passing. It may also be an option which will assist in furthering an amicable settlement of the acquisition.

A good computerized inventory of previous state salvage property sales will be a good starting place in determining the retention value to be offered. Close contact with the house moving industry or demolition industry will also provide information upon which the agency may make informed offers.

**12.1.5.6. ACQUISITION PHASE SALE OF IMPROVEMENTS**

A second option for disposing of improvements is to hold a public sale or auction. The sale or auction should return to the government the greatest net proceeds and they should be open and competitive. The objective of an open and competitive public sale or auction is to provide the greatest net return to the government.

Sales should be advertised as soon as it is known that the occupant will be vacating the premises. Advertisements should indicate that there may still be an occupant on the premises. The right to
cancel should also be reserved if the occupant is still in occupancy. Coordination with relocation personnel and possibly the occupant should resolve any potential conflicts.

If the expected advertisement date for the project allows adequate time for the sale and removal of improvements, coordination with project engineers or highway construction contract specifications personnel is advisable because the improvements to be sold and removed must then be eliminated from the clearing and grubbing contract improvement list or the portion of the construction contract which lists improvements to be removed by the contractor.

It is also important to require a performance bond from the purchaser of the improvement to pay for removal should he or she fail to remove it from the project area.

**12.1.5.7. ACQUISITION PHASE DEMOLITION**

The third option for disposition of improvements is through demolition. Demolition may be through either a demolition-only contract, or as an item in the roadway construction contract. If it is to be carried out as separate demolition contract, contract provisions and administration should be coordinated with the construction section to assure that necessary provisions are included, such as prevailing wage rate requirements (Davis-Bacon for Federal-aid projects), subcontracting limitations, and civil rights provisions.

Finally, it is important to ensure that the appropriate owner and/or tenant vacation notices have been given and the contractor not be given notice to proceed until proper possession is secured.

**12.2. POST-CONSTRUCTION PROPERTY MANAGEMENT**

Post construction property management is similar to pre-construction property management except that in this phase of the project the owning agency has the opportunity to function as a profit-making private enterprise. The highway ROW, or as it is generally known, airspace, is a capital asset which belongs to the taxpayers. The state DOT or owning agency has a fiduciary responsibility to conserve and protect this asset, and to obtain the highest return possible for the taxpayers.

There are many locations where the owning agency has land or airspace excess to the needs of the highway facility. The determination of property as excess is usually made by a combination of offices within the owning agency. Although the property management section is typically found within the ROW office and it coordinates the requests for disposal of excess lands, it is usually the engineering department that must make the determination as to its necessity to the highway facility. There are also legal and fiscal functions to be processed when disposing of excess land. It will usually be a ROW responsibility to market highway airspace for utilization by the private sector.

When resources are scarce and needs are greater, any activity which has the potential to generate revenue or income should be exploited to its fullest, while at the same time protected from the slightest chance of fraud, waste, abuse, or mismanagement. Property management is an area in ROW that has the potential to return some of the investment made by the taxpayer.
The FHWA must approve uses of airspace on the Interstate system.

12.2.1. POST-CONSTRUCTION DISPOSALS

In general terms, a disposal is the releasing of a previously acquired property interest which at the time of acquisition was needed for the maintenance, construction, or operation of the highway. A disposal of property may include excess property that is outside the finally developed ROW; excess surface areas outside the ROW; surface areas within existing ROW; and highway airspace beneath or above a highway structure or the area over a highway.

Federal regulations require the disposal of properties purchased with Federal assistance, but not directly needed for program purposes, as soon as practical. Therefore, the acquiring agency must, to the extent it is able, predetermine in the project agreement which properties will become excess upon project completion and will require disposal. The state DOT’s ROW procedure manual should set forth the disposition process.

Per 23 CFR 710.401, the FHWA must approve disposals of property on the Interstate system. To obtain the FHWA approval to dispose of ROW, the first step is to determine the project's status as it relates to the FHWA acceptance of the project. One way to determine the status of the project is to obtain the final construction inspection report by the engineers on the construction project and the date set for the completion of a ROW project.

A request for disposal along the Interstate system should include an explanation of why the property is no longer needed for Interstate purposes and include a plan which identifies the property to be disposed, including access control in relation to the construction features and the remaining ROW when applicable. Release of access control is a disposal of a property right and is treated as such.

The state should, as a part of its application to the FHWA, indicate the status of the parcel of land as it relates to availability or desirability for parks, recreation, highway aesthetics, and other environmental purposes.

See 23 CFR part 620 and part 710, subpart D for Federal requirements when disposing of ROW. Federal involvement comes into play when portions of the highway ROW are no longer needed for highway purposes. This includes changes in the control of access to the highway from adjacent properties which are not relinquishment situations, i.e., to another governmental agency for highway related purposes. The FHWA approval is necessary for Interstate routes. The ROW operations manual and FHWA/state oversight or stewardship agreement address the extent of other FHWA actions.

Acquiring agencies shall charge current fair market value (FMV) or rent for the use or disposal of real property interests, including access control, if those real property interests were purchased as a part of an FHWA funded project. Since this property was acquired with public funding, the principle guiding disposal would normally be to sell the property at FMV and use the funds for Title 23 transportation eligible projects, per 23 U.S.C. 156 and 23 CFR 710.403(e). The term FMV as used for acquisition and disposal purposes is as defined by state statute and/or state court
decisions. Exceptions to the general requirement for charging FMV are set forth in 23 CFR 710.403(d).

There are several ways to carry out this disposition at FMV. For example, it could be disposed of at public sale based upon the appraised value; public auction or solicitation of bids utilizing several advertisements over a reasonable span of time and market area; or through good faith negotiations with a purchaser on the basis of current appraised FMV. An appraisal will typically mean a before and after value appraisal of that which is being disposed, which will identify any increase in value caused by the disposal of ROW.

Parcels which were acquired as uneconomic remnants and incorporated into the ROW are treated, at the time of disposal, as any other ROW being disposed of in terms of the FHWA requirements. Any payment received for the disposal is to be used for other Title 23 U.S.C. eligible project expenses, as with other post-construction property management income. Remember, approval by the FHWA is required for disposals on the Interstate system.

12.2.2. POST-CONSTRUCTION RELINQUISHMENTS

A relinquishment is defined as the conveyance of a portion of a highway ROW or facility by a State DOT to another governmental agency for highway use. Refer to the 23 CFR part 620, subpart B. A relinquishment by definition is for a highway purpose and is to another public agency. If the receiving agency no longer needs the relinquished property, it then becomes surplus property and may be treated as a disposal.

12.2.3. POST-CONSTRUCTION HIGHWAY AIRSPACE

Airspace is defined as that space located above and/or below a highway or other transportation facility's established grade line, lying within the horizontal limits of the approved ROW or project boundaries.

12.2.3.1. HIGHWAY AIRSPACE MARKETING

The marketing of highway airspace is similar to the marketing of other commodities. Supply and demand are the economic factors controlling the feasibility of successfully marketing highway airspace. There are many questions that should be asked. Does a market exist which would potentially find the airspace desirable? When would the airspace be more effectively marketed, in spring, summer, or fall? Is the marketing of airspace to take place prior to or after its development? If it is going to be marketed prior to development, then marketing would normally be directed to developers and/or investors. If it will be marketed after it is developed, then marketing would most likely be to users.

What will be the scope of airspace development? Will all uses be encouraged, limited only by Federal and/or state regulations or will the scope be limited to a particular use, such as parking or storage? The scope may also be limited by outside influences such as zoning and or local land use ordinances.
To what extent is private participation in the marketing of the airspace encouraged? Will private investors supply the funds to a private marketer to develop the advertising plan to lease the development to private users?

The development of a model marketing plan, a model lease contract and a model sales contract to protect the state's interests is encouraged prior to actively initiating the marketing of the airspace.

Advertising the airspace site or improvement is necessary for a successful marketing plan. When advertising the site or improvement, will there be an emphasis on advertising if the target market is the general public?

Marketing techniques may aid in the successful leasing of highway airspace. The state-of-the-art marketing techniques applicable to highway airspace include but are not limited to:

1. Policy Considerations. Depending on the location and political environment of the area, consideration of local or regional policy goals may be necessary. What is needed is a way to sense these situations, and determine community objectives. If there is a conflict between policy and economic objectives, it must be resolved, or at least balanced so that all concerned can agree.

2. Legal Considerations. The legal uses of airspace under the FHWA regulations, as well as Federal and state laws, are limited. There may also be local laws or ordinances and court decisions affecting the use of airspace. Another item of concern is the legal risks for particular uses of airspace. It is a good idea to identify who or what groups would object to the use of the airspace.

3. Security Considerations. The primary concern is for the integrity of the highway facility. The primary reason to limit or restrict airspace use is safety.

4. Demographics. Demographic information can support targeting a market that is apt to utilize the airspace. Such statistics can usually be obtained through the Census Bureau. Demographics can identify potential first, second, and third tier airspace users and whether such markets should actively be farmed for potential lessees. Demographics can help to identify likely desirable users, and to indicate the various marketing approaches which may be necessary to "sell" them on the benefits of airspace leasing. Also, if subleases will be used, the relationships among multi-tier airspace lessors can be used to structure such leases.

5. Valuation. The value of an airspace project must exceed construction cost to be economically effective, and attractive to those who will ultimately use it. An appraisal or a feasibility study is developed to estimate the profitability of a proposed project. The feasibility report would provide the estimated income potential, the potential for vacancies, and provide for losses and reserves for capital replacements. The state DOT must know this information to determine if a project is worth the effort in terms of net income from leases.
6. Advertising Campaigns. Successful advertising approaches are directed to all potential tier users of airspace. Depending upon the depth of involvement by the owning agency, advertising may be handled under contract with an advertising agency, or it may handle the advertising itself. The appropriate uses of the various media, use of advertising agencies, and advertising costs play prime roles in attracting quality tenants to the airspace facility.

12.2.3.2. HIGHWAY AIRSPACE DEVELOPMENT

The development of highway airspace is no different from developing any other property except that the development will occur on public ROW. This exception adds a significant dimension to a development project since Federal and state regulations concerning highway facility safety, and certain dimensional and engineering limitations (height, width, clearances configuration, pier placement, etc.) need to be taken into account.

- Compatibility. Development and use of highway airspace should always be compatible (as guided by the FHWA regulations) with the highway. Such uses should compliment the highway facility. Also, it is important to determine what uses would be compatible with existing land use plans and/or zoning ordinances, the desirability of compatibility, and what exceptions, if any would be acceptable. Determine the existing zoning of adjacent areas for use in the compatibility test.

- Insurance. The airspace owner agency should be aware of the insurance ramifications of proposed airspace site uses. Some agencies are required to insure themselves by state law. The state DOT needs to understand the local insurance requirements relative to the development of airspace.

- Requests for Proposals. An agency may submit a proposal to the general public which identifies how the state DOT expects the airspace to be developed. An agency may also request developer proposals to obtain multiple construction options. Proposals should be analyzed by reviewers experienced in cost estimating and familiar with the variety of proposal techniques. The successful bidder should be selected on the basis of reputation, integrity, cost, and ability to see the development through to its completion.

- Source of Funds. An important part of the development of airspace is the identification of available sources of funding. It is a good idea to be aware of where a developer would search for financing. This information can be used to assist a developer. There may also be governmental programs available that would assist either financially or logistically in development of the airspace site. It is important to know of these programs and the amount of assistance available through them.

- Personnel. The development of an airspace site must be managed. The use of project managers and project engineers on such projects, especially large ones, are common, and they are usually employed by the developer or general building contractor. If the airspace project will affect the highway facility during construction, then planning is necessary to coordinate the phases of construction with the use of the highway facility.
• Safety. Safety considerations are of prime importance. Since September 11, 2001, security may require additional measures. Safety considerations should be analyzed from the view of necessity, protection of the airspace user, protection of the highway facility, cost effectiveness, and reduction of risks and insurance premiums. During development, additional risks due to the construction of the airspace use exist, so insurance costs tend to be higher.

• Engineering design. Engineering elements necessary to design a successful airspace utilization facility include, but are not limited to, construction specifications, local, regional, and national building code requirements, and any engineering coordination with the state DOT which may be necessary.

• Construction. This includes everything from property surveys to finish work. This may also include site preparation, development of new construction techniques, project management, facility systems (plumbing, electrical, fire protection, telecommunications, and security), site access, and construction material and equipment staging areas. The construction process may take up to approximately half of the total time devoted to the entire airspace development project.

• Inspections. The development of airspace should include regular and periodic inspections of the project. There are many systems and subsystems, phases and components that need professional inspection during construction. Not only does this include quality control inspectors from the general contractor, but also local building code inspectors. There are many the different types of inspections necessary from the property manager's perspective. Someone employed by the airspace owning agency should be assigned to complete periodic inspections.

12.2.3.3. HIGHWAY AIRSPACE MANAGEMENT

The management of developed highway airspace is not unlike the management of a private development. There are legal, maintenance, and economic concerns. The successful management of developed airspace is accomplished through the application of good property management business practices. Those who are responsible for the management of highway airspace are encouraged to operate their organization as a profit-motivated property management company.

The Consumer Price Index (CPI) is not a reliable indicator by which market rental rates should be adjusted and should not be used in rental rate adjustment clauses.

ADJUSTING RENT

• Lease. Leases are the heart of an airspace utilization program. A highway airspace lease agreement should contain the provisions necessary to protect the lessor and lessee, cover the handling of contingencies, term of the lease, and may include build to suit, and tenant improvements options. Other lease conditions may be escalation clauses, maintenance requirements, and emergency response conditions.
- **Maintenance.** Normal maintenance requirements for airspace facilities should be identified. Where an airspace facility and highway facility share a common element, the entity responsible for the maintenance should be identified. The standards of maintenance quality to be required of airspace owners and users should be clearly identified. Maintenance contracts, if used, should be identified. A typical maintenance contract should show who is normally responsible for specific items.

- **Insurance.** Various insurance policies may provide sound fiscal protection for both the lessor and lessee. The type of coverage and dollar amounts of protection will depend upon the nature of the proposed airspace, and any other risk factors to be considered. Be aware that only certain insurance underwriters may deal in such policies.

- **Monitoring.** Once a facility is operational, there will be a need for monitoring the operation of the airspace facility. How this is done and how often will depend on the type of facility. Contractual and legal agreements are used for enforcement and compliance with the contract. The potential sources of income mandate use of an accounting system to track the finances generated by the facility.

### 12.2.4. MANAGEMENT OF JOINT DEVELOPMENT AND MULTIPLE USE HIGHWAY AIRSPACE

The terms **joint development** and **multiple use** connote the creative use of highway ROW to provide benefits to communities and to assist in blending highways into the environments they traverse. More specifically, joint development is a coordinated planning process carried on by highway agencies and other agencies or organizations, within the corridor of a proposed highway. Joint development is the coordinated multiple use (i.e., land uses and transportation systems) development of public transportation facilities. The development often involves a mixture of public funds with institutional/nonprofit funds and/or private sector investment. See chapter 14 for information on joint development and multiple uses of ROW.

### 12.2.5. CONTROLLED ACCESS FACILITIES

Controlled access facilities have special features which require an awareness of their operation and the additional rights acquired from adjacent property owners. These rights are what must be effectively managed to ensure the operational integrity of the facility.

#### 12.2.5.1. NEW ACCESS POINTS

Consider the following items when a new access point is proposed:

1. Who initiated the request and for what purpose is the access to be used.
2. Relationship to other highway improvement plans and programs, if any.
3. Distances to and size of communities or activities directly served or will be served.
4. Description and analysis of the existing access condition and the proposed access.
5. Traffic and operational analysis for existing and proposed conditions; including crossroads
and other roads and streets to the extent necessary to assure the ability of them to effectively collect and distribute traffic from the new access.

6. Any other information that might help explain and/or support the proposal, e.g., cost effective analysis, source funding, implementation schedule, etc.

12.2.5.2. ACCESS CHANGES, INCLUDING MOVING THE ACCESS CONTROL LINE

Per 23 CFR 710.403, all uses of or improvements on the ROW created by a modification of access control lines must be of value to the traveling public as opposed to the special interest or benefit to the person or persons proposing to alter the established access. When an access point is changed along a controlled access facility, or when the controlled access line is moved from one location to another, the following may apply:

1. FMV can consider whether the additional access is required primarily for highway purposes and is not directly, indirectly, or substantially motivated by or related to a non-highway purpose.

2. FMV must be obtained whenever the property interests were obtained with FHWA funding.

Reasons such as the change will improve local economic conditions by providing more jobs or more services, maintain the local business environment and increase the tax base, provide low income housing, protect and preserve the environment, mitigate local or state agency requirements in order to develop the property adjacent to the highway, etc., are not acceptable alone as meeting a highway purpose.

Access control is a valuable public asset and a movement of the access line and/or providing a new access point should be evaluated both in terms of (1) the effect upon the highway system, (2) the effect upon the adjacent or nearby property, and (3) the perception of the highway facility to be gained by the public and others who use the highway facility.

In terms of the effect upon the highway system, operational factors should be noted, and future expansion or modification of the highway facility or the unit to be placed thereon, as well as alternatives to the use, should be carefully considered. Will the proposed use restrict future use of the ROW for a highway purpose?

The effect on adjacent or nearby property is usually the reason for the request for modification of the access control. Exposure to the traffic for its advertising value is a plus factor for business and might well be a negative factor for other persons living and/or working adjacent thereto. Granting a new access or moving the access control line gives those using the highway facility and those who just observe it a different perspective. Landscaping, natural growth of trees, wetlands and the view from on and off the highway may change. The change may be good or bad but it should be evaluated.