

# Decision-making of property owners and tenants in the face of compulsory purchase

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## Abstract

Government compulsory purchase poses severe threats to private properties in that the possible beneficial uses and exchange value of a property are adversely affected. In the face of compulsory purchase, property owners and tenants are expected to take actions to alleviate their possible loss. Two road-widening projects in highly developed urban areas in London, England and Kaohsiung County, Taiwan, are examined to uncover how property owners and tenants have reacted against the adversity brought on by the uncertainties of compulsory purchase. Empirical evidence shows that instead of passively accepting government-set cash compensation, a significant number of property owners and tenants have taken legal, market-oriented, and even political measures to reduce their possible loss, in addition to their appeal for a higher compensation.

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## Compulsory purchase as a threat to livelihoods

There are a number of policy instruments at a governments' disposal for the acquisition of land, including voluntary sale, leasehold, land exchange, public-private ventures, nationalization of land and compulsory purchase (Kitay, 1985; Farvacque & McAuslan, 1992).

Among these

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potential measures, compulsory purchase of real property is an uninvited disruption to economic activities on specific sites and subsequent compensation shall ensure no undue detriment to the interests of property owners and tenants. [Cernea \(1991, 2000\)](#) forcefully argued that expropriation of land removes the main foundation upon which people's productive systems, commercial activities, and livelihoods are constructed. There are, therefore, costs associated with the use of compulsory purchase powers in that it may lead to landlessness, loss of livelihoods and increased poverty if the owners or tenants are not adequately compensated ([Larbi, Antwi, & Olomolaiye, 2004](#)). What a property owner in fact possesses is the right to carry a circumscribed list of actions ([Coase, 1988, p. 155](#)), and this right is known as property rights. Property rights tend to influence incentive and behavior ([Furubotn & Pejorich, 1972](#)), thus the property owners and tenants will respond to compulsory purchase to cope with their possible losses. [Munch \(1976\)](#) investigated an urban renewal program in Chicago and concluded that under eminent domain, high-valued parcels systematically receive more than market value and lowvalued parcels receive less than market value. This is probably because in the United States the courts settle the compensation values, and in general, owners of high-valued parcels can more easily afford to take legal action than owners of low-valued parcels. The research by [Syagga and Olima \(1996\)](#) discussed the socio-economic impact compulsory land acquisition has had on persons affected in the third Nairobi Water Supply Project in Kenya. Construction of the dam forced many people to move out and to settle in new areas. The affected families were compensated for their lost assets, and they also received social assistance to assist them in transporting their belongings. Purchasing of the new land, however, was solely the responsibility of the families. Field surveys by the authors showed that the average income of the displaced households in their new settlements is merely 18.3% of previous earnings. One possible reason is that some land parcels partly acquired were too small to efficiently use. Likely, because of the reduced site size, 12.2% of land owners were forced to rent land from others. Moreover, 36.5% of families interviewed said their families were forced to split up and to resettle in different places. In addition, the compensation for and the delays in land acquisition resulted into significant cost overruns. Bureaucracy and resistance by land owners, among others, account for over 65% of time loss ([Olima & K' Akumu, 1999](#)). [Imrie and Thomas \(1997\)](#) examined a regeneration project in South Cardiff in Wales where sites of 32 small and medium-sized businesses were compulsorily purchased. The period from when the compulsory purchase order was confirmed to when the final firm vacated the area was under a year. Many firms interviewed by the authors felt criminalized and unfairly treated in that they were unable to respond to such a short deadline and the legal procedure treated all firms or households indifferently. [Szablowski \(2002\)](#) documented a mining development in Andes of Peru in which land purchase and resettlement of residents on

purchased land were involved. The mining company offered a high purchase price, promised to replace purchased lands through subsequent resettlement and promised to undertake development projects for the benefit of local people. Over the course of the negotiation, the company also tactically used servitude as a threat. The company persuaded the residents that if they did not accept the company's offer for land purchase, the residents would most likely receive a nominal

compensation for servitude back up from the law and governments. Needed lands were purchased within 2 years with the guarantee of resettling residents whose land was purchased. However, lands previously designated for resettlement was later reallocated for an expanded construction site and resettlement was redefined and replaced by cash payment. The mining company originally promised a resettlement programme, but instead residents were simply given cash and asked to leave; in consequence, favorable local popular opinion was replaced by outrage and distrust. In an article reviewing the resettlement management in Indonesia, [Zaman \(2002\)](#) pointed out that the relevant decree lacks provisions on resettlement and restoration of income and livelihood of project-affected people. In consequence, compensation paid for land and other assets is typically less than replacement or market value. In the North Java Flood Control Sector Project, the low compensation together with the rapidly rising land price in the project area left the displaced residents with only enough funds to purchase a fraction of the land they had lost and thus a reduced living standard.

[Cernea \(1989\)](#) pointed out that resettlement following compulsory purchase can cause special problems for traders, small businesses, street vendors, cottage industries, and many others through the disruption of commercial ties with customers, suppliers and distributors.

Resettlement is, however, often viewed narrowly as moving people to another location without further provision or means to restore their lost incomes or livelihoods ([Zaman, 2002](#)).

Certain types of intangible assets are not counted, and the lost productive assets may be difficult to replace in kind, particularly land in densely populated areas. As a result, the cash-only compensation implicitly shifts the burden of solving consequent problems to displaced owners. The principle of equivalence intrinsic to cash compensation is therefore limiting ([Nayak, 2000](#)), and replacing land

with land is by far a more successful strategy than compensation in cash. This principle is supported by empirical evidence in the developing countries ([Cernea, 2000](#)). Cash compensation alone generally fails to warrant restoration of previous living standards, on both economic and social terms. This failure is mainly brought about by rising land and property prices in neighboring areas where compensation recipients are likely to move into, loss of business

customers and disconnection of social networks. All these elements sharply diminish the value of cash compensation. Nevertheless, it is in the property owners' benefit to not dispute

their compensation with governments in that public officials are experts with wealthy experience. A survey (Adams, 1996) indicated that compulsory purchase is widely used in the UK to overcome the problem of a final stubborn seller and to back up authority in negotiation with landowners. Given a low possibility of winning and high costs involved in arguing with governments, affected property owners and tenants are likely to accept an unsatisfactory compensation. Previous studies have shown that law and legal processes are not autonomous but relational, therefore, different actors affected by compulsory purchase will experience it differently and often will react in quite diverse ways (Imrie & Thomas, 1997). Jones, Jimenez, and Ward (1994, p. 214) reviewed research with regard to the impact of public policy on land price change and pointed out that the long ignorance of the state's role in impinging on or engendering social conflict has led to a corpus of literature that is largely econometric. They call for investigations into the process of public policy intervention on local land market in the belief that the length of time during which a project was initiated, negotiated, and finally completed is critical in evaluating this project.

### **Research issues identified**

The current paper attempts to evaluate the impacts of road-widening projects using compulsory purchase on the property owners and tenants, and on the local property market. Reliable property prices over time are not available, but actions taken by affected property owners and tenants through interviews and questionnaires are expected to reflect the impacts. Two road-widening projects with similarities in several respects are examined, one in England and another in Taiwan. These two projects are both undertaken in a long established and highly populated area with a road passing through, which supports the local traffic and regional economic prosperity. Only partial frontage was required for the majority of properties thus merely a limited number of residents were compelled to leave. Because only a fraction of the property from the majority of owners was required and there was no plan to redevelop the remaining sites in the area, other land development methods, such as land readjustment/pooling (Archer, 1992), is not applicable. In addition, both projects had been in discussion for a lengthy period of time prior to its commencement. In contrast, previous research paid more attention to projects where a large area was developed, and their discussions were largely placed upon the resettlement of deprived residents and the superiority of either cash compensation or land-for-land compensation. However, neither the legislation in England nor Taiwan provides land-for-land compensation, likely due to their already insufficient land stocks in urban areas. In other words, compulsory purchase in a highly developed urban setting has seldom been examined and its possible impacts are not clear. Despite the many similarities in these two projects, the differences in specific legal

details in England and Taiwan help to demonstrate the differing decision-making choices people in the two countries have taken. This comparative analysis also serves to provide new insights, ideas and fresh interpretations on an under-researched topic. Moreover, a comparative study, in the absence of a well-received model or relevant data, is likely to provide persuasive evidence for policy makers seeking to emulate success and avoid proven failure. In our view, the importance of this paper largely lies in its stress on the time element of compulsory purchase process and the measures the interest parties have taken to lessen their loss. The two projects will be examined followed by comparisons of research findings from each case before conclusions are drawn.

### **The A40 road-widening scheme in London**

The A40 is the main road leading westward out of London toward Oxford. Over the past years all of the intersections on this road have been upgraded through the provision of flyovers and underpasses, with the exception of two locations in the inner London suburbs, Gipsy Corner and Western Circus. A flyover was first proposed in 1968. In 1983, the Department of Transport (DoT) published a pamphlet of several alternative routes (Department of Transport, 1983) and an exhibition was held. Finally, a public enquiry took place in 1989 followed by the confirmation of the compulsory purchase order in 1991, and the scheme was scheduled in 1996/97 (Department of Transport, 1996). As a result, the majority of properties needed for the A40 scheme were demolished by 1997 when this study was undertaken. Soon after, the plan for upgrading the A40 road between Gipsy Corner and Western Circus was abandoned by the Government in July 1997 (Ealing Council, 1998). Platt (2000) recorded interviews with a number of residents living alongside the A40. One interviewee felt that yfor as long as she has lived on Western Avenue, there have been plans to rebuild the road; now it seems that years of blight, and the public inquiries, and the demolition of half of the neighborhood, were for nothing. (p. 247)

Another local resident replied

yeverything has gone according to plan; unfortunately, the plan kept changing. (p. 271)

The situations those property owners faced are illustrated in Fig. 1.

Authorization of a compulsory purchase in England needs to be conferred by a compulsory purchase order and comprizes five major procedural steps: first, making the order in draft; second, publicising the draft order; third, dealing with objections; fourth, deciding whether the order is to be confirmed or rejected; fifth, publicising the order if it is confirmed. Once the order is confirmed it becomes law. As soon as a compulsory purchase order has come into operation, the next stage is the actual acquisition of particular properties under compulsory powers. The acquiring authority then shall give a notice to treat to all the persons interested in,

or having power to sell and convey or lease the land (Davies, 1994). The majority of properties demolished in the A40 scheme were dwelling houses, and the rest were primarily small shops. Because it was exceedingly difficult to reach property owners or original occupiers of demolished houses, a site where houses were still in use was chosen for interviews. The site of the case study included 72 houses located on the north side of Western Avenue and to the west of Gipsy Corner. Because of this road widening, either the entire property or portions of the front yard of these houses were to be acquired by the DoT. A study of properties on this site therefore provides an opportunity for examination into the impacts of the A40 scheme on these property owners. What we expect to have occurred on the case study site are as follows. This scheme caused property owners difficulties with selling their properties. The property owners were likely forced to dispose off their properties at a substantially lower price in that few people would wish to purchase a house that is to be purchased by the government. An alternative to a sale at a reduced price would be for these owners to move out and put their properties up for rent. Renting out the properties can compensate for some of the owners' loss. Knowing this, property owners rented out their properties, and as a result, the number of rented houses increased. Furthermore, people

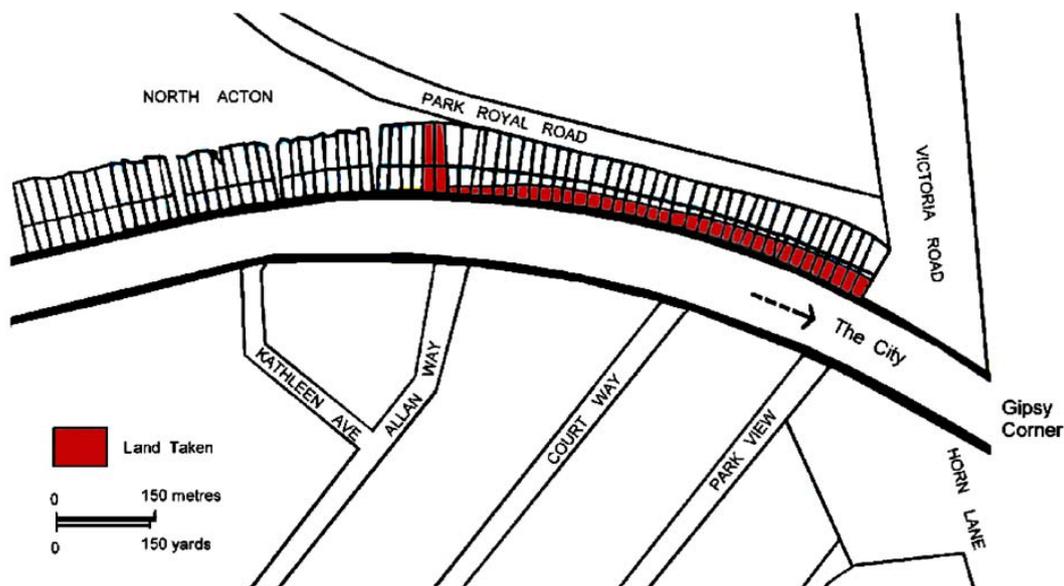


Fig. 1. Map of the A40 Road along Gipsy Corner.

who were willing to rent a house here, knowing of the approaching compulsory purchase, were less concerned with stability of the tenure. People with this characteristic tend to be young and without a family. In contrast, the elderly remained on the site because they are unable to or unwilling to move out. A major reason for this is that the amount realized from

selling their houses would not be sufficient to purchase another one. Moreover, they are retired and have no need to move for work reasons and are more attached to this area than younger people looking for new opportunities. Therefore, owner-occupiers on the site of the case study tended to be elderly.

Face-to-face interviews were undertaken with all current households during April 1997. Households on this site consisted of owner-occupants and tenants. Fourteen of these houses were vacant, under refurbishment, or for sale; 23 households were owner-occupiers, 19 were tenants, and the remaining 16 could not be identified because they either declined an interview or could not be reached. Eventually, 19 owner-occupants and 12 tenants were successfully interviewed.

The impact of the scheme led two owners to consider moving out. On the other hand, 17 owners decided to remain on their properties. The attachment to their homes and neighborhoods is one of the principal reasons they chose to stay. Nevertheless, the majority of the residents admitted that the amount realized from the sale of their houses would not allow them to buy another comparable one. Thus, financial difficulty is as expected a major constraint that has prevented them from moving out.

There are two groups of tenants; they are tenants of the government, residing there through the social security system and those of private landlords. Overall, the tenants were young and unmarried. The two main reasons they rented the houses were easy access to their work and cheaper rent. Four interviewees had considered moving out, but nearly half of the tenants had never taken moving into account. This suggests that most tenants rented the houses largely as a temporary shelter and gave little consideration to tenure stability.

The [Highways Agency \(1997a, b\)](#) stated that the houses owned by the Agency on the site of the case study were purchased under the discretionary blight procedures over the past years. Because the term 'planning blight' was first introduced in the Town and Country Planning Act of 1968, blight notice could not possibly be applied to any purchase of houses prior to that year. Therefore, the pre-1968 purchases must have been reached through some voluntary agreement. According to a correspondence from the [Highways Agency \(1997a\)](#).

the properties may have first been acquired when the scheme had a slightly different route or they may have been acquired under a discretionary blight purchase (close to the effects of the proposed roadworks with mitigating factors leading us to agree purchase).

In another letter from the [Highway Agency \(1997b\)](#), it stated that those properties that have been sold or are in the process of being sold can be assumed to be purchased under the discretionary blight procedures.

As described earlier, property owners facing compulsory purchase might have discretion to sell their properties to the government prior to when properties are physically acquired for

construction works. Fig. 2 shows the number of properties that have been transferred to the DoT over the years.

Fig. 2 shows that the transfers of properties from owners to the DoT date as far back as 1965, only a few years before the first draft of the scheme was due for publication in 1968. This wave of transfers lasted for a few years. The second wave started after 1983 when the alternative routes were announced to the public. The publication of alternative routes was indicative that the scheme was likely to be put into force. Following the revelation of proposed routes, a number of properties were transferred to the DoT over the ensuing years. In addition, two other waves of transfers have emerged since 1989 and 1991 at the time when a public enquiry was held and when compulsory purchase orders were issued respectively. The latest wave lasted until 1997 when the construction work was about to begin. The transfer of properties on the site of the case study shows a similar trend to that of the whole scheme. The first wave of transfers started around 1968. Following in 1983 when the alternative routes were announced, a number of property owners started selling their properties to the DoT, which continued over the years.

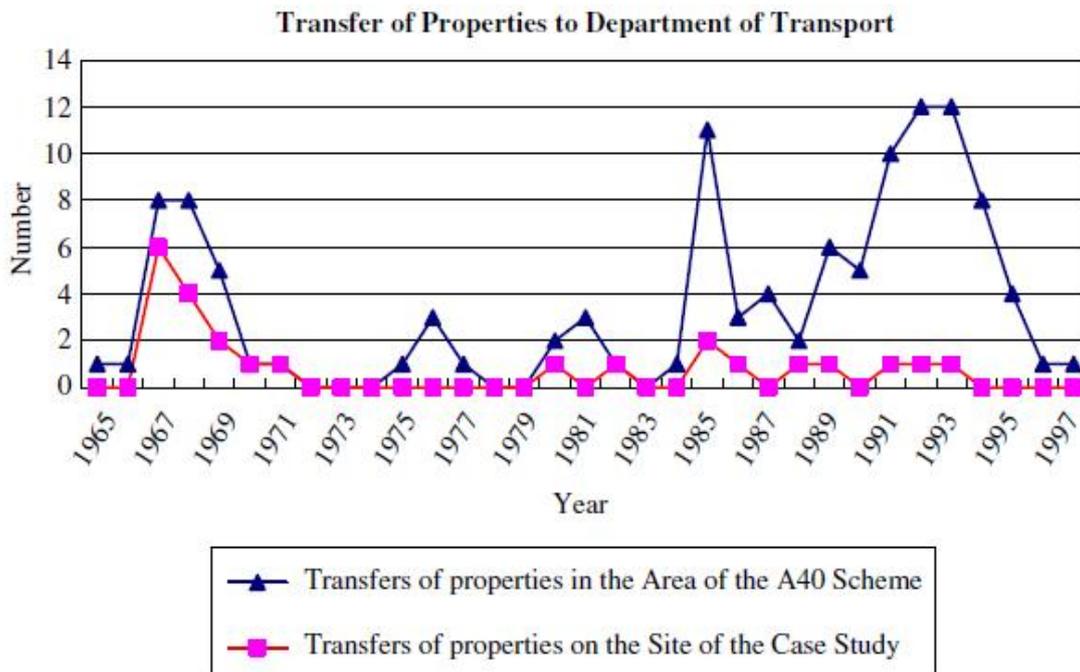


Fig. 2. Transfer of properties to Department of Transport, source: Highways Agency.

Discussions thus far with regards to the uncertainties of the road-widening scheme assume that all households on the site of the case study have been in the same position. However, this is not entirely true. Among the several routes being proposed, the houses closer to Gipsy Corner had been included in all plans. On the other hand, the houses on the other half of the site were not included in any plan although they were immediately adjacent to houses next to

Gipsy Corner. For simplicity of discussion, the area closer to Gipsy Corner will be called area A, and the other area will be called area B. Area A includes the households from No. 258 to 330, and area B is from No. 332 to 400. A number of contrasts in relation to tenure status are provided so as to uncover differences between households in these two areas. Bear in mind that areas A and B are actually adjacent to each other in location and would appear to be otherwise virtually identical rows of houses.

The tenure status of households in areas A and B is contrasted in [Table 1](#). In area A, excluding the nine households with unidentifiable tenure status, among the remaining 28 households, six (21%) were owner-occupied, seven (25%) were tenants of the DoT, three (11%) were private tenants, and 12 (43%) were empty, waiting for refurbishment or for sale. In area B, by contrast, apart from seven households with unidentifiable tenure status, among the remaining 28 households, 17 (61%) were owner-occupied, one (4%) was a tenant of the DoT, seven (25%) were private tenants, and two (7%) were vacant, waiting for refurbishment, or for sale.

Table 1  
Tenure status of households in areas A and B in the A40 case

	Area A	Area B
Owner-occupiers	6	17
DoT tenants	7	1
Private tenants	3	7
Empty/vacant	12	2
Others	0	1
Unidentifiable	9	7
Total	37	35

Among the 24 houses purchased by the DoT, 23 were located in area A and only one was in area B and purchased in 1992. That is to say, among the 37 households in area A, more than 62% had voluntarily sold their houses to the DoT between 1967 and 1993. This remarkable contrast suggests that since the households in area A had been facing a possible compulsory purchase, the owners would rather sell their houses to the DoT early than to wait for compensation at an uncertain future date. In contrast, the above observation had never occurred to owners in area B because compulsory purchase was either not expected or was expected at a fairly low probability by households in area B.

The 12 empty houses in area A, which belonged to or still belong to the DoT, were probably purchased by the DoT at the request of the previous owners. Moreover, the seven rented houses currently managed by the Housing Association and by the local council on behalf of the DoT were likely to have been transferred to the DoT in the same way. In regards to the three houses let to private tenants, two were in fact bought from the DoT. In contrast to area A, most houses in area B were still owner-occupied and all rented houses except one were owned by private

landlords.

The marked contrast between the two areas in terms of the distribution of tenure status reflects on the impact that the prospect of compulsory purchase has on the property market. In response to the high possibility of property in area A being compulsorily purchased, several owners sold their houses to the DoT and then moved out, as demonstrated by the large number of rented houses owned by the DoT. The high proportion of tenants, low proportion of owner-occupiers, and high proportion of empty houses in area A are in sharp contrast to their counterparts in area B. Thus, the differences in the prospect of compulsory purchase have had a substantial but diverse impact on the two areas even though, in the end, houses in neither area were needed for the road scheme.

### **The A1 road-widening scheme in Kaohsiung county**

The compulsory purchase project examined in the Taiwan case is ‘the A1 road-widening scheme through the Lu-Ju village (thereafter called the A1 scheme)’. This scheme has been in planning for over 30 years and until November of 2004, lands, however, were not physically taken. Face-to-face interviews with households were used to determine their attitudes and responses toward this scheme, and they consisted of groups of owner-occupiers and tenants.

The power of compulsory purchase in Taiwan is secured according to the following procedures (Lee, 2001). First, the acquiring authority applies for approval of a proposed compulsory purchase scheme from the appropriate approving authority. Second, the approving authority transfers the scheme to the local government where the lands to be acquired is located, if the scheme is confirmed. Third, the local government must publish the scheme and serve a notice on every landowner and person with interest in any land covered by the scheme. Fourth, a person with interest in the land may serve a written objection to the local government. Fifth, the rights to the land by the owners are extinguished after the compensation is fully paid, and then the actual acquisition of the particular land can proceed.

In Taiwan, unlike most other countries, there is no assessment of land particularly for the purpose of compulsory purchase. The compensation for acquired land is based on the public announced price (PAP), which is assessed annually and announced in March by government authorities mainly for the imposition of Land Value Increment Tax (LVIT). That is to say, the same PAP is applied for the purposes of both the levying of LVIT and the payment of compensation for land acquired from March to February next year. It is interesting to note that

PAP plays contrary roles between LVIT and compulsory purchase. If PAP is high, it is financially good for a landowner whose land is acquired, but bad for a landowner who sold properties in the normal market; however, if PAP is low, the dispossessed landowner suffers from loss of compensation, but the owner selling in the normal market benefits from a reduced tax burden. The influence of PAP on the levying of LVIT is more widespread than

compulsory purchase because there are more people paying LVIT than people whose lands are acquired. This explains

why the government has tended to keep PAP low. In addition, the time lag between the announcement of PAP and acquisition of land could have adversary effects to owners whose lands are needed, particularly when the land price is on a rise. Generally, the assessment of the PAP represents market value, but in reality, this is rarely the case. In 2000 and 2001, the PAP was 55.8% and 57.2% of the market transaction prices, respectively, in the Taiwan province excluding

Taipei and Koashiung cities (Chang, 2003, p. 2). The government often sells public land by auction; however, it does not negotiate prices with the owners whose lands are compulsorily acquired. The time elements, PAP problems, and the auctions of public lands at market prices lead to much public resentment toward compulsory purchase.

The width' of the A1 road was specified in the local development plan of 1974 to be 40 m. In Taiwan, lands which have been allocated for use as roads or for other public purposes according to the city planning may be reserved for compulsory purchase (called reserved land thereafter) at a later date, and any construction thereon shall be prohibited, except for structures of a temporary

nature. Those lands that are subject to a future compulsory purchase shall not be put to any use that hinders their eventual compulsory purchase. The period in which lands are allowed to be reserved was extended in 1964 to 10 years and then again in 1973 to 25 years. In 1988, the private property rights of reserved lands were further attenuated because restriction on duration length was simply removed, primarily to save the government from an immediate financial predicament. Without any time limit to acquire the land, the owners of the reserved land seem to be caught in a life sentence in terms of exercising property rights.

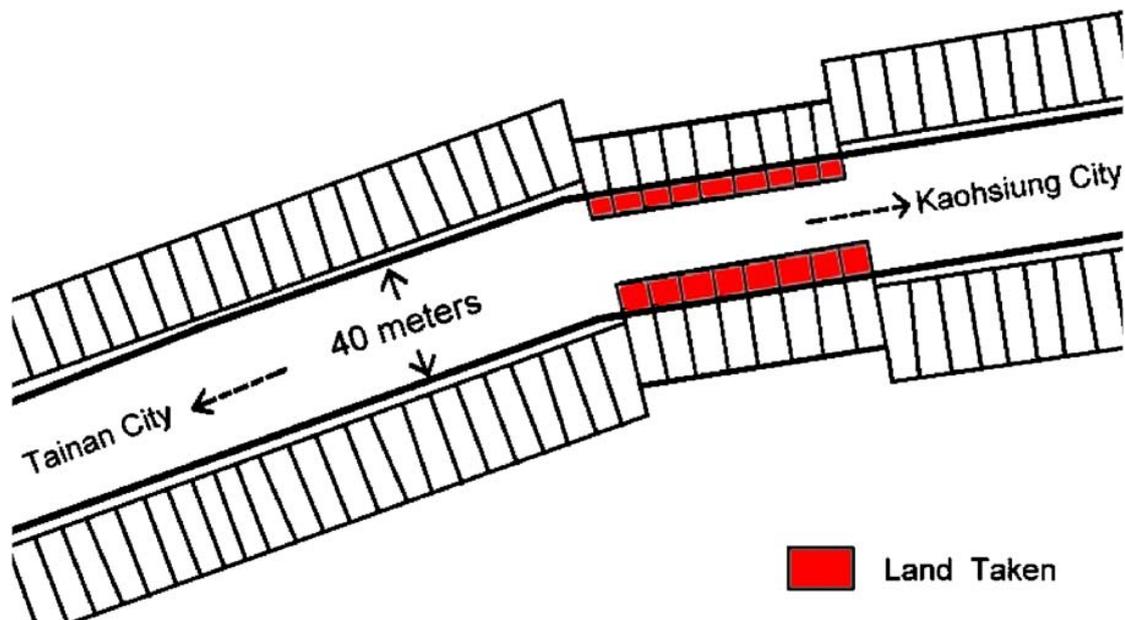


Fig. 3. Map of the A1 road through Lu-Ju village.

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 This road was first built (8-m wide) under the Japanese colonization, followed by an expansion (12-m wide) during

1957 to 1958. The latest expansion (25-m wide) is therefore the third road-widening.

The A1 road was widened from 12 to 25m in 1976 (the first phase). The remaining lands that were to be acquired were designated as reserved lands. During the early 1990s, the Highways Bureau (the authority responsible for acquiring land), in accordance with the programme of acquisition of reserved land, acquired the remaining lands to further widen the road to 40-m wide. The Kaohsiung County Council, on behalf of the Highways Bureau, made an announcement in 1991 on compulsory purchases (equivalent in principle to issue of compulsory purchase orders in England) to acquire land for the second phase of the road-widening scheme. Following this announcement, compensation for land was determined and deposited in the local court in 1996. The values of buildings over land were appraised in 2000<sup>2</sup>, but compensation for the buildings was not paid until interviews were undertaken in April 2002. The principal reason for this is that the Highways Bureau could not obtain the necessary budget to pay the compensations. Because compensation for the buildings was not given to property owners, the procedure for compulsory purchase was not yet completed.

In the Lu-Ju area, since the commercial activities are concentrated along the middle section of the A1 road, most buildings there will be partially demolished. Buildings along the northern and southern sections of this area are relatively new, and the 40-m road plan was known when these buildings were built. Thus, these buildings were fronted onto the new road boundary and were not affected. However, part of the land in front of these buildings will be taken. The situations those property owners face can be seen in Fig. 3.

In response to the 1991 announcement of the second phase of the road-widening scheme, residents in this area organized a campaign for an alternative road

Table 2  
 Responses from property owners and tenants in the A1 case

Interested people	Responses		Number
Property owners	Actions	Petition	54
		Purchase land behind house	3
		Both	3
	No actions		38
Tenants	Actions	Petition	2
		Moving out	3
		Both	2
	No actions		21

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<sup>2</sup>In Taiwan, the amount of compensation for land and buildings are paid separately. In this case, residents were against this scheme, and as a result, they refused government valuers' entrance into the buildings. Thus, valuation of the

buildings was actually assessed from outside of the buildings.

passing outside this area. The majority of the people in this campaign were running businesses along the middle section of the A1 road. Demolition of their buildings, even a partial demolition, would force their businesses to totally cease.

Interviews with all affected 514 households were undertaken in April 2002. Among them, 98 property owners and 28 tenants responded to our questions, and the remaining 388 households declined interviews or could not be found. As mentioned above, compensation for compulsory purchase in Taiwan has long been substantially below the normal market price. Considering this, properties marked for compulsory purchase will be very difficult to sell in the market. In short,

compulsory purchase is a great threat to the value of private property. Figures in [Table 2](#) suggest that property owners responded differently from tenants. The majority of property owners took actions against this land acquisition, but the majority of tenants did not. Property owners, in order to safeguard their property values, began a series of petitions and protests. Some even purchased land behind their houses to avoid moving; they planned to consolidate the remaining land with the newly purchased land to rebuild a house on it. In contrast, tenants, without the need to worry about property values, tended to take no actions. Few tenants joined property owners in their petitions and protests against the compulsory purchase, and a number of them considered moving. From this case study, we reached the conclusion that in the face of compulsory purchase

by the government, the different interests of the property owners and tenants led to their different responses. Property owners took actions, primarily of a political nature, to lessen their expected loss. Tenants overall took no actions and were willing to wait and see. It is also observed that a number of previous shops within the road scheme area had already moved to a nearby area to continue their business. These shops tend to cluster in proximity and their owners intend to remain a presence in local business.

### **Market-oriented solutions compared to political actions**

Market-oriented solutions in the A40 case are selling of properties, letting of properties, and transferring of properties to the government (DoT) before they are compulsorily purchased. These measures, defined as market type solutions, are in contrast to the legal-oriented solution—remaining in ownership of properties and waiting for compulsory purchase. Our observations

overall indicate that property owners have a general inclination to apply market-oriented solutions to handle the risk they face. The rented houses and the considerable number of voluntary transfers of properties to the DoT over the years in area A seem to be indicative of property owners' preference for market actions over legal reaction. Of course, it could be argued that transfers of properties to the DoT could not be counted as a market solution.

However, all the sales to the DoT in this case were on a voluntary basis, which in principle is no different than transactions in the market, except that the DoT was the only de facto buyer. After all, property owners had full discretion to wait for compensation throughout the process. In this regard, a discretionary blight purchase has provided a, though not perfect, substitute for market mechanism.

The legal system in Taiwan leaves little choice to owners of land acquired by the government. At the early stage of this scheme, the belief that the road-widening scheme would most likely not take place resulted in normal market transactions of properties in this area. However, when property owners realized that the scheme was to materialize, they took political action: petitioning, protesting, and even attempting to block the budget for this scheme. People in the Taiwan A1 case apparently took a different route from their counterparts in the England A40 case. One explanation for this is the lack of British-type discretionary blight procedure. Property owners were not allowed to transfer properties to the government before properties were needed for construction work. After many years had passed, owners who remained on their properties, therefore, attempted to avoid this threat by political leverage.

This paper takes into account the compulsory purchase process as well as the compensation level. That is, given that a lengthy process has become the norm, owners would employ market-oriented solutions if they were available and would follow political action if they were not. In contrast to highly motivated property owners, tenants tended to be apathetic and less motivated. A wider road reduces traffic congestion, and the benefit is enjoyed by all road users; however, the burden of the compulsory purchase is placed upon particular individuals. Thus, compensation to people whose properties are compulsorily acquired by governments is sometimes reasoned as an insurance against threats (Cooter & Ulen, 1997, p. 152). Compensation is paid by the government but is in fact raised through taxation. Risk spread equally among a large number of property owners arguably calls for public insurance in the form of monetary compensation for compulsory purchase. The above argument seems convincing but is not satisfactory for the current cases, which take many years to complete. The government is required to pay compensation, but it could come sometime in the remote future. In this respect, argument of social insurance needs to be employed with great caution. Some property owners in the A40 case required the government to purchase their properties sooner and were therefore, able to keep their wealth in cash. Property owners in the A1 case, subject to the lack of similar rights to the British discretionary blight purchase, instead mobilized political resources to block the scheme, in order to keep their wealth in-kind.

The economic positions of property owners under threat of compulsory purchase are expected to be restored through monetary compensation. However, case studies in this paper indicate that the insecurity and uncertainty of property rights in the course of compulsory purchase might result in the inefficient use of land. The A40 case demonstrates that

compulsory purchases led owners to use lands differently from what they otherwise would have done. In the A1 case, an organized protest group was formed as human and political resources were mobilized. Impact of a scheme does not occur at a point in time but instead starts far earlier and is in place throughout the scheme.

## **Conclusions**

At a time when decision-making for public projects is transparent, the value of properties involved is affected far before the properties are physically acquired. The opportunity costs of waiting for compulsory purchase with an uncertain future are no different than any other costs incurred during the process. Empirical evidence in this study suggests that property owners and tenants in the face of compulsory purchase did exhibit certain kinds of actions to lessen their loss, which would otherwise not have been observed. The impacts of compulsory purchase on local areas will be reflected not only through the conspicuous changes of acquired properties, including more rented and vacant houses for instance, but sometimes also through accelerating obsolescence of the neighborhoods due to spill-over effects. Thus, a compensation system with a focus only on monetary compensation seems to be neither fair nor efficient, particularly when an income-generating property, like a shop, is involved, as the loss to property owners is difficult to quantify. Property owners need time and efforts to attract new customers at a new location and in some cases it is impossible.

Because compulsory purchase seems to be the most feasible way to acquire land for a roadwidening type project, the policy focus shall be placed upon the mechanism by which the interference of compulsory purchase with the property market or with the owners' disposal of properties is reduced as much as possible. Blight notice employed in England seems to serve this purpose well as it facilitates the smooth transfer of properties from owners to the government.

However, it also makes the financial planning of compulsory purchase all-important. In contrast, the stringent restrictions placed on property rights in Taiwan were declared unconstitutional, by the Constitutional Court in 1996 in Interpretation No. 400, and reserved land was required to be purchased as quickly as possible. This decision safeguards the rights to private properties and requires the government to face the real costs and to behave in the general interest. A favorable compensation for compulsory purchase is therefore one that minimizes the interference with a property owner's way of using or disposing of his property.

A land-for-land compensation might work satisfactorily for a large project in rural or developing areas, but might not be an alternative for a project in such highly populated urban areas as those in our study. Land parcels comparable to those acquired are rarely available in

the neighboring areas. In addition, because only a fraction of property for the majority of owners was acquired and there was no need to redevelop the remaining sites in the area, other widely

employed measures of land acquisition are not applicable. In a road-widening type project, the disutility resulting from a reduction in size of dwellings or shops normally cannot be redressed through cash compensation and the slightly improved traffic. Problems highlighted in the current study are expected to occur in developing countries where some cities are experiencing rapid expansion fuelled with the immigration flows from the rural areas.

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