

J A M E S T H E A R D

Academic Papers and Projects

Urban Physical Design · Statistical Data Analysis
Urban Planning Development · Public Policy

*Publication Edition of the 1993 Manuscript
With Statistical Appendices A–E*

Note on This Edition

This edition presents four academic assignments written by James Theard in 1993: a design case study of the Jamaica Farmers Market (Urban Physical Design), an endterm regression project (Statistical Data Analysis), a development analysis of the same market (Urban Planning Development), and two Public Policy papers on the Housing Act of 1937 and a 1965 memorandum to the Secretary of Housing. They appear here as five separate parts in the order of the original manuscript, followed by an editorial addendum that reads them together.

The author's wording, terminology, and historical and statistical assertions have not been revised. Punctuation, capitalization, headings and layout have been regularized; evident typographical errors have been corrected; and two pages that repeated text from the preceding page have been removed. Square brackets mark editorial interventions and passages that could not be read with confidence in the original. Personal identifiers that appeared in the manuscript have been omitted.

The computer output and worked tests that accompanied the statistical project are gathered in Appendices A–E. Every regression table was checked for internal consistency, and each correction, derivation and open item is recorded in Appendix E.

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PART I

Farmers Market Jamaica: Design Considerations in the Construction of a Downtown District Farm and Food Hall

Urban Physical Design · Professor Maxine Griffith · December 11, 1993

The information for this paper was provided entirely by an interview with Peter Engelbrecht, director of design for the Greater Jamaica Development Corporation.

Introduction

The most appropriate measures to convey the great significance that the site approval and design considerations played in the creation of the Jamaica Farmer's Market is to recreate the chronology of individual and coordinated efforts by members of the project design team, accounting for design criteria as well as the impetus behind, and the obstacles faced by, particular design efforts as they related to aesthetic and social concerns and zoning and design review mandates.

The design of the Farmer's Market was of singular importance to The Greater Jamaica Development Corporation [GJDC], a non-profit, publicly-funded economic development organization which has focused its efforts at revitalizing downtown Queens; the corporation, which owns and operates the year-round, permanently enclosed, \$7.5 million project, saw creating a visually attractive indoor food court and farmers hall as a means not only to give the downtown residents a sense of community by giving them a large, open area in which to shop and eat, but also to make the Jamaica Avenue retail strip more attractive and inviting to busy workers and commuters waiting for buses, leading them to spend their money in the market and elsewhere on the strip.

Background on Downtown Jamaica

Jamaica, Queens, ten square miles in area and eleven miles east of Manhattan, is home to one of the outlying borough downtown districts which have been targeted in this case as a state designated economic development zone—to receive economic and political support for a variety of economic revitalization efforts involving local municipalities, non-profit community development groups and local businesses. Typically, these actors, largely through initial public investment, form partnerships aimed at creating programs and development projects to invite private investment in the local community.

Downtown Jamaica—its potential for successful redevelopment being a by-product of its location as a major commuter bus and railway transportation hub between two major airports—has focused its efforts at a combination of office development and retail center initiatives—the farmer's market containing both of these elements—aimed at enabling the district to capture a fair proportion of the growing back-office relocation market.

The intensity of GJDC's revitalization efforts, exemplified in the construction of the Farmer's Market, mirrors the complexity of the area's social, economic and political history as well as the difficult steps

taken toward successfully “priming the pump” for local, private reinvestment in a competitive and dynamic regional economy.

From its conception, the Farmer’s Market was idealized as a prime economic factor, and a visual anchor, in the turnaround of a physically disjointed, once vibrant community, which had thrived as one of Greater New York’s primary regional retail centers before the suburban shopping mall explosion robbed it of middle and upper-class income shoppers within its trade area.

Jamaica was once known as “the gateway to Long Island...among the largest railroad centers in the United States in terms of scheduled trains handled...and the third largest retail shopping center in New York, with tall, modern office buildings, department stores, banks and other public buildings...assuming the aspect of a substantial city.”

With the shrinkage of the local economy’s trade area came, during the 70’s and 80’s, decline in local services, relocation of businesses to the suburbs of Long Island, and eventual physical and economic isolation as affluent white residents moved out of the community, and blacks and immigrants moved in working primarily in food-processing facilities, government offices and low-scale, unsophisticated retail marts.

The area has continued some scaled-down commercial activity because nearby residents who cannot drive continue to shop there; but it has also experienced a wave in creation, within the last decade, of culturally diverse activities, particularly related to foods. The area has also been the site of a seasonal farmer’s market which, until now, was conducted in the outdoors after the summer harvest. Notably, not only residents, but commuters as well, in the past have taken advantage of these opportunities to experience culture and purchase fresh farm produce, despite the local area decline as a regional retail center.

The Farmer’s Market signifies a recognition and a consolidation of these unique attributes in retail food and farm goods, giving both a home under one roof, in a building designed to attract residents and commuters alike. Naturally, the intentions of the design team were to create a project that would ensure the survival of the local economy’s strongest points; the Farmer’s Market embodies the vision of revitalizing a community, and also tells a story of what makes a community.

The Design Process

The Farmer’s Market: A Brief Description

The development is a 26,000 square foot, one story building with a second level, 5,000 square foot addition. The market is located on two lots, with the unusual circumstance that one lot contains a publicly purchased and funded portion of the market while the other lot contains a privately owned, older existing structure which was incorporated into the project design; so the project evolved as two separate design components—food hall and farmers’ hall—which are physically distinct, the former on the lot facing south on Jamaica Avenue; the latter, consisting of two rows of open stalls facing each other, on the lot facing north and abutting a side street (160th Street) perpendicular to the avenue. The 5,000 square foot addition is designated as business office space.

The market is located in a C4-2 commercial zone. The site is actually located outside of a central business district in a major commercial center where buildings are typically shorter, with higher lot coverage than other commercial zones, as prescribed in the zoning mandates for a C4-2 zone; and there are public parking requirements attached to the development as well.

The market is designed to contain 16 individual farmer's stalls and an equal number of spaces for retail food shops (ranging in size from 300 to 1500 square feet), with seating for 250 patrons. The project is designed with three different entranceways: Two side entranceways, one to the food court and the other to the farmers' stalls, and a main entranceway allowing access to both from a major street. High ceilings and a glass-closed atrium create the impression that the market is very tall and expansive. The project also contains a service courtyard where trucks stop to unload produce and other deliveries.

From the Beginning

During preliminary design creation, the GJDC wanted an architect to build an inexpensive, informal project merely to relocate the existing outdoor farmers market, a series of rickety tables stocked with produce, from the edge of King Park to a more appropriate commercial site, where it would become more visible. Air-conditioning and heating were not even considered in the initial development plans.

A design team was formed consisting of GJDC's design director, and graphic design, retail design, lighting design and structural engineer firms as consultants. As ideas were expressed at the table, changes in the project's scope were gradually made.

The retail design consultant, Bubb Designs, which had experience in design of food courts for suburban shopping malls, suggested that the farmer's market should be expanded to include a food court, since that would command a higher rent per square foot (\$40/sq.ft rather than \$18/sq.ft). The privately owned lot site was then acquired by GJDC with a grant from the Urban Development Corporation. The second lot, condemned by the city, was given to the corporation as a gift.

Site Approval and Design Review Concerns

The site approval and design review process reportedly went "without a hitch because the city really wanted the project to come through successfully." Since the development was done as of right, it was unnecessary to acquire a variance to begin development.

The site was then to undergo Uniform Land Use Review Procedure [ULURP] on the private site. A Project Data Statement and a partial Environmental Impact Statement were required, completed and approved with no determined negative impacts. Because city funded projects are required to undergo a formal aesthetic review, the Municipal Arts Commission had to give their approval of the project, and reportedly were "shocked at the scale and the workability of the project's design for our area."

Some of site approval and design review considerations that arose were:

- Required one parking space per 300 square feet of retail space on site. Standard was relaxed by allowing space in neighboring municipal parking garage to be used by patrons

- Equitable Life Insurance Company provided \$2-million with GJDC to finance a fifty year mortgage provided that a side entranceway, one-half block in length, be constructed as a “Farmer’s Lane” leading from Jamaica Avenue. This cut into available retail space on the site, requiring financial reconfigurations as well as redesign after construction started
- Board 12 required installation of public toilets and hiring of local residents to perform construction on the site.

The design team had established a number of design mandates which it felt would make the market a communal, safe and active center within downtown Jamaica, including:

For the Exterior

- Making the market noticeable and accessible to pedestrians from side streets by widening the sidewalks from 8ft to 12ft
- Extending the building facade over the sidewalk by installing canopies over open windows from which the farmers stalls can be visible
- An archway over the Jamaica Avenue lane entrance, and lighting in the Farmers lane path leading to the entrance doors
- Appropriate lane landscaping consisting of an enclosed brick walkway, a tall chain fence covered with vines on one side, and windows exposing market activity on the other side

For the Interior

- Create the impression of a Victorian, majestic feel with high ceilings above the seating section in the Food Hall
- Maintain horseshoe design so that all the stores could be seen by patrons—also making all units equally rentable
- Provide within each food store a high, open, airy skylit space and amenities such as adequate facilities including phone lines
- Rear open space and service yard retained for 7 to 12 truck capacity

All consultants worked under the supervision of the design director to coordinate their efforts toward an economically efficient, high image project with appropriate amenities for consumers and producers alike. A great deal of effort and discussion and submitting and resubmitting of plans took place over a two-year period, but a number of problems were experienced with the project:

- The electrical engineer, inexperienced in the design of food courts, underestimated power and air conditioning requirements for individual units
- Project could not attract an anticipated table service restaurant for one of its large spaces because it was unable to obtain a liquor license, being across the street from two churches
- Unable to lease office space on the second level, because the market had bottomed out, GJDC forced to rent space to Mormon church at reduced rent

- An incompetent construction company acquired through the city bidding process could not complete the work and set back the project for a significant amount of time
- GJDC was unable to attract merchants at the estimated rents because of the midway distance of the food hall from Jamaica Avenue, which was already lined with a number of visible food stores
- The impression from patrons that the walkway was not safe
- Unable to find long lease occupants because of ongoing extension of unit facilities, space has been rented month to month in nearly fifty percent of the units.
- Inadequate lighting in food court. Design of a theatrical lighting system in the food hall was not carried out because GJDC ran out of money.
- Design overestimated needed seating capacity by 100 seats, which will be taken out to provide for more retail space in order to recover lost rents

The predominating errors in this project reflected the design team's inability to "fit" their debt financing, revenue stream and space availability; this was largely the cause of overzealous or inadequate design of the exterior and interior of the food hall, and the provision of facilities within it. The market has been given two more years, under its financing terms, to turn a profit, which may not happen, and, fortunately, is not making any payments on its mortgage for another five years. Despite the problems, its design director is hopeful that patrons will continue to attend the market and that merchants will convert to long leases as more people attend and design corrections are made.

Conclusion

Downtown Jamaica's misfortune is the negative perception that it is not safe. Immediately south of the district is crime-ridden, drug infested, South Jamaica, Queens, which GJDC believes, interferes with the success of their economic development initiatives. This is certainly the case with the Farmers' Market, perhaps located on a poor site, because it is in the middle of a block rather than exposed on the edges of the block where there are large numbers of pedestrians.

But then, the building's designers wisely took it into consideration to combat a perilous and economically deadly image by creating a building with pretty, landscaped, well-lit walkways; a walkway that, when you turn upon it, can be mistaken for the turn of the corner, an extension of the street leading toward more retail shops and fresh produce.

As disjointed as Downtown Jamaica appears, the Farmer's Market is a well-intentioned effort to create a sense of connection of the streets, inviting unity between merchants and pedestrians.

PART II**Endterm Project in Statistical Data Analysis***Statistical Data Analysis · July 13, 1993*

[Editor's note: Variable definitions, the SPSS/PC+ program, the worked hypothesis tests and the complete regression output that accompanied this project are presented in Appendices A–E.]

Summary of Tests: Model One

The initial model regression run, which contains six independent variables, passes the test of overall model significance. The individual independent variables, with the exception of the population variable (p), have signs on the b coefficients that match the priors determined before the model run.

The b-estimates for disposable income, density of population and intergovernmental revenues are all significant in the model, and the b-estimates for population, percent non-white and poverty are insignificant. The paired variables (p, den), (di, pov) and (di, den) are highly collinear as reflected in their matrix values and low tolerance values.

Autocorrelation

There is no need to run an autocorrelation test because we are using a cross-sectional rather than a time-series model.

Revised Model

In the revised version of this model, I have deleted the variables for population, percent non-white, and poverty.

Population should be deleted because it is inconsistent with the other variables in this model which have been expressed in percent or per-capita terms rather than gross terms. More specifically, the variable for density is already a measure of population. Density is a better measure than population, being measured in thousands of people per square mile, and is a significant variable in the model, whereas population is not. The fact that population carries the wrong sign and is insignificant is probably a reflection of the high level of collinearity between it and the density variable (.670). Removing it will relieve us of a redundant, overly broad variable measure and clear the collinearity from density so that its true impact can be known.

The NW variable, which measures the percent of the population that is non-white, is insignificant and not collinear with any of the other variables in the model. It should be removed at the outset because it is also an overly broad variable to include in a model. Typically, census data will measure social, economic (income) and population data by race, age and ethnic group categories, arriving at measures that vary significantly by group.

In effect, lumping together a large number of the population into the category of “non-white” (as opposed to Asian, Black, Hispanic, etc...) and measuring it as a percentage will lose a great deal of

information and confuse the data in other variables of the model that account for levels of income and population.

The poverty variable (POV), which is insignificant at the five-percent level, does not lend anything to the model. Because it is measured in percent of households, it is not a percentage measure of the income per capita (per person) but rather a measure on the basis of a conception.

More wealthy individuals will likely consider a housing unit (i.e. Single-family home) in which they are a single household. However, poorer individuals may typically have doubled or tripled up in multiple dwellings with many ‘households’ within a particular unit. Since this is hard to measure (Since it depends on the identification of a household as such by the occupants) it is a shaky basis for measurement. This is also a redundant and insignificant variable. Disposable income is already measured in our DI variable, which is expressed in per-capita form and is more consistent as well as significant in the model

Summary of the Tests: Model Two

The second model consists of the remaining variables DI, DEN, and GR (per-capita intergovernmental revenues for normal functions). All three b-coefficient estimates agree with their priors. The model F-test reveals that at least one of these variables is having an impact on the dependent variable ‘normal city expenditures’, and the t-tests show that all three of our chosen variables have an impact on the independent variable. The TOL values show that multicollinearity is not a problem in this model which justifies the removal of the other three variables for the reasons mentioned above.

Heteroscedasticity

The Goldfeld-Quandt test for heteroscedasticity reveals that there is no presence of heteroscedasticity in our improved model. The calculated F-statistic from our ESS values for the upper and lower values reveals that there is no significant variation of the error terms for the values of x along our observations. We can say that the model is homoscedastic.

Choice of Model

Model Two is an improvement upon model one because it is shown to have no multicollinearity whereas the initial model had a high degree of it between more than one of the independent variables. The model is homoscedastic and autocorrelation is not a consideration here, which indicates that we have a very good model for estimating the effects of these variables on normal city government expenditures. The model F’s cannot be compared because they differ due to the variability of the k-calculations. Because we have corrected for the problems, we can put faith in our estimated standard errors, and we already know that the b-coefficients are BLUE. No third model specification is necessary here.

The Real World

This model does provide a reasonable description of how normal government expenditures operate. Disposable income per capita increases are a measure of increased earnings (therefore increased

taxation and spending), as population density increases we would expect the value of expenditures to increase for the same reason; more people to tax and more services. It is a fair conclusion that more funds coming from the state and federal levels to a City government would result in an increase in city government spending as well. In this way, the priors are correctly determined and reflected in the model.

As for the magnitude of the coefficients relative to each other, density is seen to have the highest impact on the dependent variable. On an increase of one-thousand people in a square mile area of the city would lead to an increase in government expenditures of \$6,800. A loosely populated city would have less government spending activity as a direct result of there being fewer people to tax and fewer needed services (i.e. dense population can signify an area with many poor apartment dwellers and a less dense area can be suburban single family homes in a middle class neighborhood nearby). A large, densely populated city will have a large government and a need for it.

GR has an appropriate coefficient with less of an impact than density but not as low as disposable income. The fact that these figures reflect 1973 data is an important consideration. It points to the poor forecasting ability of this model because of outdated data figures. Undoubtedly the impact of GR on city expenditures across cities has changed over time due to migration and the growth of government as well as other factors. A time-series analysis for individual cities of the changes in government expenditure would be appropriate. Had this study been conducted in the 1960's the impact of GR on E would have been significantly greater.

According to the model, disposable income has a much smaller impact on the dependent variable E than either of its model counterparts. For every one unit change in disposable income (i.e. per capita DI increase \$1000) there is a change of .06 (\$60) in city spending. The fact that disposable income levels will vary from city to city on the basis of population and size of government would relegate the disposable income influence to a relatively low position.

[Editor's note: A handwritten annotation at the foot of this page is only partly legible and is not reproduced.]

PART III

The Jamaica Farmers Market: Downtown Jamaica Development Analysis

Urban Planning Development

It was in April 1990 that a groundbreaking ceremony marked beginning construction of the eight million dollar Farmers Market project, a regional downtown produce mart in Queens. The jointly funded public-private commercial development is located at the heart of Jamaica Center, an economic development zone targeted for retail and industrial revitalization since in the early 1960's.

The Farmers Market, located at 160th Street between Jamaica and 90th Avenues, is a conceptual improvement upon the original market located at 153rd Street, a series of outdoor vendor stalls that gave tri-state area farmers opportunities to sell their produce seasonally. The new two level market, contained entirely indoors for year round convenience, is thirty thousand square feet of space converted into a structurally and technologically efficient project and is a smart investment in the Queens commercial district.

It includes a climate controlled food atrium where up to fourteen vendors can display produce, a skylit central dining area that seats three hundred fifty people, nine-thousand square feet for food restaurants, five-thousand square feet of second floor office space and an adjoining five hundred car parking garage.¹ The Food Hall and Farmers Market developers have included incentives to rent space and operate business. They include professional retail consulting, tenant improvement grants, state-of-art security system, market wide promotion, advertising and entertainments. Electrical maintenance, janitorial service and refuse carting are also provided to tenants at a small monthly cost.²

The market was designed primarily to provide a place for residents, health care workers, government employees, businesses and students in the area to have access to fresh and prepared foods from various cultures. The developers also wanted a revenue source for other local residential and commercial development and to attract more private investment. Developers have devised programs to attract small businesses to the available office space.

The Jamaica Farmers Market is like icing on the cake for revitalization of the downtown Queens commercial district. It marks the near completion of a well-rounded, multifunctional metropolitan center. Jamaica Center currently contains three hundred retail stores and over eleven thousand white collar workers.³ It is a major transportation hub having the Long Island Railroad, three subway stops, major highways, bus service and John F. Kennedy Airport nearby.⁴ The Joseph P. Addabbo Federal Office Building and its three thousand workers are only three minutes away from the market site. Mary Immaculate hospital, the downtown hospital for Jamaica since 1992, has four hundred workers and is also only a block away. York college has a system of four thousand students and six hundred faculty members just five minutes

from the market.⁵ Jamaica Center also is home to Gertz Plaza, containing six floors of office space and two thousand workers. A nearby arts and entertainment center, major banking centers, the head branch

of the Queensborough library and three courts bring the total of workers surrounding the Farmer's market to eighteen thousand.⁶ Close to three hundred and eighty four thousand people are known to shop in the area so that the advantages of constructing the market in the center of downtown Jamaica are fairly obvious. So much potential sales revenue more than justifies the need for it, and a year-round capability design makes the prospects even more appealing to developers and investors. The market will cement into the center of a thriving commercial district, a permanent home for Jamaica's traditional farm to market hub and ensure a popular and successful revenue stream.

The major industry in Jamaica is food-processing, with twenty five companies and jobs for fifteen hundred people, followed by metal forging and electronic components production. An industrial base of two hundred and sixty two firms provides jobs for almost seven thousand people. The number of employed marks a thirty percent increase in a seven year period which signifies other successful attempts at growth fostered by development corporations in the past few years.⁷

Jamaica Center is home to sixteen thousand people in six thousand and seven hundred housing units. The residential area is fifty nine percent black, thirty two percent white and eight percent other groups. Middle class families earn a median income of thirty one thousand dollars per year.⁸

The New York City Public Development Corporation has pushed for construction of the Farmer's Market for the past five years with all the major prospects of its development in mind and along with the Greater Jamaica Development Corporation, a non-profit organization formed as an offshoot of the Regional Plan Association in 1967 and dedicated to downtown Jamaica development, have put together a package of funding for implementation of the market plan.

While the Public Development Corporation (PDC) is responsible for managing construction phase of development, the Greater Jamaica Development Corporation (GJDC) is responsible for all marketing and the leasing of the property.⁹ The GJDC, which receives some funds through the PDC, owns ten thousand square feet of the market development. The remaining twenty thousand is owned by the city yielding an annual base rent of seventy two hundred dollars over the initial four year lease period.¹⁰

The Greater Jamaica Development Corporation was founded on the ideal of bridging the gap between the government of New York City and the activities and goals of businesses after determining that downtown Jamaica was a worthy spot for development purposes. They believe firmly in the combined effect of private and public efforts. "The Farmer's Market is being developed jointly with the U.S. Economic Development Administration through the Department of Housing and Urban Development," says Carlisle Towery, President of the GJDC.¹¹

The intense interest in the success of the Farmers Market project is heavily indicated by the private and public support that has gone to its development in the past two years both in gaining the funds and seeing construction and marketing strategies through to completion. Bankers Trust underwrote the market's startup and has given the idea continual support. Public and private funds have come from a many sources including 1.03 million dollars in city funds with support from the Borough President's office, 1.1 million from the New York State Urban Development Corporation, two million for construction from Chase's Community Development Corporation and 1.2 million from the Equitable Life Assurance Society.¹²

The GJDC, under its Real Estate Development and Finance Committee, acquired the land for development. The project received strategic technical and financing assistance from the New York City Office of Business Development and from the New York State Division of Housing and Community Renewal.¹³

The combination of wide-ranging support that has made the completion and completion of the project a reality, comes with no small expectation from the constituents.

The Farmer's Market has received broad backing in the press and in community newsletters from political, developmental and business organizations and for a host of legitimate reasons. Mayor David N. Dinkins says, "by building a permanent, year-round home for the market, we are investing in an established community service. The project is proof that even with limited public funding we can stimulate the cities economy by enhancing commercial activity in local business districts."¹⁴

Borough President Claire Shulman says, "the project represents another major step in revitalization of Jamaica."¹⁵

Both the borough president and the mayor were present at the groundbreaking ceremony along with managers and directors of various organizations that are involved with the projects.

Carl Weisbrod, president of the New York City Public Development Corporation, called the market project "a development that will provide the Jamaica Farmers Market with a permanent home and also build upon our existing merchant base thereby encouraging future development throughout the area."¹⁶

Lee Webb, Executive Vice President of the New York State Urban Development Corporation, says "We are delighted to be part of the public/private participation that is revitalizing the area."¹⁷

Chase Community Development Corporation Director Mark Willis labeled the development project as worthy of an investment because "it will strengthen the office development that is already underway by providing a needed amenity that serves both residential and commercial communities."¹⁸

In August the developers signed on its first three tenants, including the Sbarro's and Everything Yogurt national chains and a Brooklyn restaurant. The three leases reportedly have a two and a half million dollar value at forty dollars a square foot. Other lease negotiations are underway.¹⁹

If the Jamaica Farmers Market, scheduled to open in November, is to be completed as a positive addition to the realization of an attractive and secure business environment, it is up to its developers to make it attractive to businesses. The Greater Jamaica Development Corporation, in conjunction with the Greater Jamaica Chamber of Commerce, has compiled a package deal of benefits for people willing to become tenants in the market or in the second level office spaces.

Gus Jehla, the GJDC Area Maintenance Consultant, says, "We have a plan where we will work with government agencies and Community Board 12 to fight illegal dumping, vandalism and poor maintenance of lighting and signs." The corporation is even offering utility discounts, such as reduced electricity, gas, water and sewer rates. Benefits also include tax abatements and credits, and low-interest loans to those who wish to relocate their business and need to acquire new equipment.²⁰

Registration packages with information on all benefits are distributed to business locations around Queens by the Chamber of Commerce.

But are the amenities that the GJDC seek to provide to potential tenants a short-cut for development in Jamaica? The retail draw of the Farmers Market is very attractive, but businesses undoubtedly want full-protection of their investments which may translate into a desire to see programs to alleviate crime and reinvest in the community. Only a half a mile from the outermost boundary of the mile long, half-mile wide Jamaica Center is South Jamaica, Queens, an area notorious for drugs, crime and poverty. Some workers have expressed a fear of walking to subways at night and not a few residents of South Jamaica have complained that they do not benefit directly from downtown economic development. “People will often say that downtown Jamaica is a bad neighborhood but they mean South Jamaica. They aren’t the same place. Downtown Jamaica is a safe place,” says Carlisle Towery, President of the GJDC, and the corporation asserts that the purpose of the Farmer’s Market is solely “to enliven the downtown, utilize vacant land, offer farmers and growers a direct marketing opportunity and provide the community with fresh produce at less-than-retail prices.”²¹ By this virtue everyone in the surrounding area is meant to benefit. The corporation has linked with Police and Fire Departments to provide protection. Hopefully that will be enough for businesses to want to move there and for them to stay once they are established.

The revenue obtained from the Farmer’s Market leasing is not intended for investment directly into the local residential community but there are other programs such as housing preservation steps sponsored by Chemical Bank and Morgan Trust Company that are geared to community improvement.²⁴

All in all, the Jamaica Farmer’s market is a responsible and well-planned effort at commercial development addressing the needs and interests of businesses. The decisions of the mayor and borough president’s office, Chamber of Commerce, banks and the development corporations themselves were expressed along the expected lines. There were no apparent conflicting principles that threatened the completion of the Jamaica Farmers Market at any time. On the contrary, many of the interests of the participants intermingled, serving to speed up the process of implementation. The key to development in Jamaica is the establishment of commercial employment and the subsequent revenue and attraction to private investment. Jamaica Farmers Market is a successful formula of planning and implementation that should further these ends for years to come.

Endnotes

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24. Ibid, page 17

PART IV

Political Process Narrative: The Housing Act of 1937

Public Policy

Perhaps no other federal government program reflects the immense scale of public housing. To trace the steps which led to Congressional approval of the Housing Act of 1937 reveals a political complexity and range of influence inherent in our system of policy formulation. A host of regulatory policy procedures on their face appear to distress individual policymakers seeking particular decisions; on the other hand, there are informal means of persuasion welcomed into the process to give policymakers an influential upperhand.

More important is the revelation of individual and institutional natures interacting in what I describe to be a role playing format dictated by that same process. It is an illuminating system of decision-making that, when put to use, compelled policymakers to seek a post-Depression solution to poverty, and, in the long run, allowed the imagination of politicians to create a detailed, feasible program centered on the notion of expanding the housing stock, through local agencies, to cure many of the nation's ills.

The 1935 Wagner Bill was proposed as a remedy to the poor living conditions and high unemployment created by the Great Depression, and not as a housing policy. Its purpose was to correct the shortfalls of the Resettlement Administration and the Housing Division of the Public Works Administration, which suffered from administrative conflicts which were to be faced in the courts. The Circuit Court of Appeals “held, in substance, that housing and slum clearance were not such public purposes as would bring acquisition of land for them within the power of Congress under Article I of the Constitution to provide for general welfare.” (Semer, p. 88)

Individual welfare concerns apparently were not at the heart of this court decision, only the question of acquiring land. The Court was not of the opinion that the Congress was entitled to this power; but it did seem to interpret “welfare” as long-term support, whereas Congress was intent only on “improving living conditions” and spurring growth (therefore making it necessary to acquire land). This double interpretation reflects a fundamental value difference. The court found against Congress trying to do what Congress didn't consider itself doing in the first place.

Congress did not appeal the decision, but they did set up a housing division within the Department of the Interior, with its secretary heading the division. Congress “bowed out as principle sponsor, owner and manager of public housing projects; henceforth, its role mainly would be to give financial assistance to state and local agencies.” (Semer p.89)

Senator Wagner of New York saw the potential for economic growth in putting Americans to work, building up the communities and bringing business to real estate developers. He was not concerned with regaining the direct power Congress had lost, but he was concerned with doing the most, through a new housing agency, with the regulating and appropriating power that Congress had; nor did he hold a dominating concern for individual well-being, but rather for the economic well-being of the nation.

However, Wagner unavoidably established the idea that a decent home for each individual is equated with the economic prosperity of the nation.

For many, that idea signified a great opportunity. In fact, the committee approval of the bill, the senate hearings, and the floor debates “reveal that, with minor topical exceptions, all of the issues were then developed and debated, all the ordinary means of housing subsidy were identified and recognized, all the major social and political motivations that make up the tissue of subsidized housing debate played their part in shaping the action finally taken.” (Semer p.82) As a result, “new institutions were invented, new policies evolved, new procedures instituted, and entire new concepts developed,” (Working Papers, p.3) which would outline the short term objective and become the base for government intervention in housing provision for the poor, elderly, immigrant and minority American.

When the committee considered the bill, specialists and administrators were called on to address technical concerns of implementation and its impact on their market, labor and minority constituencies. Committee members undoubtedly faced pressure from interest group representatives to consider improvement measures in the workplace and in communities; they also needed to address questions regarding the new boundaries of regulation over local agencies that such a bill would create. Already, the process had allowed for a widening of scope beyond the narrow dimension of long-term economic growth, and that scope included values that reflected political self-interest and the larger interest of social welfare.

Not only was the informal support of committee members in 1936 essential to getting the Wagner bill through the Senate, but also important was the networking capability of Wagner and his fellow congressmen that brought vocal public support for the bill from various representatives of business and community organizations who were witnesses at the Senate hearings. Much was discovered in this part of the process. “In the minds of some supporters their [Congress] main purpose was to put people to work and others saw them as a kind of cultural bridge between urban and rural life.” (Semer p.88) These representatives sought to influence senators who might convince Wagner to tag specific provisions onto the bill. Among the issues considered were abatement of health hazards, breaking company town arrangements in mining towns, crime, juvenile delinquency, infant mortality and racial discrimination.

Wagner did not speak on behalf of the bill, but differing perspectives brought support for it. As senators took their turns, the impact of diverse constituencies became clear. In fact there was a “variety and disparity of purposes that were thought to be the object and justification of the legislation.” (Semer p.90) Wagner attempted to get many positive opinions of the bill expressed to assure its passage. Shortly afterward, he discovered that this was exactly the problem. The bill’s objectives were not clearly stated.

The bill was revised with “new ideas and refinements that originated with a number of people in private and public life with whom they [Wagner and his supporters] had consulted informally.” (Semer p.90) It called for a Housing Authority, provisions for fixed grants and loans, “demonstration” projects, and fixed mathematical relationships between eligibility, income and rent levels” (Semer p.95) satisfying concerns of an executive branch which threatened to propose an alternative bill.

The new bill's objectives were clear. A consensus was sought on concrete issues. Wagner and his supporters had learned a lesson from the process; namely that there are limits, even on exuberance, built into the system. The new hearings were "more definitely purposeful, the witnesses more concerned, and the appearance less pro-forma than the year before." (Semer p.95) Policymakers discovered advantages to acquaintance with the process and consultation with other political figures. The bill passed in the Senate, but there was no House action.

The Wagner Bill was passed in the 75th Congress after resolution of a conflict between the House and Senate. The House re-wrote a portion of the legislation and denied the Senate power to confirm appointments and fix compensation for Housing Authority administrators. The House also wrote in a provision that called on public authorities to determine the amount of money they needed and to report that amount to Congress for approval rather than receive an annual fixed amount in grants and loans. This measure indicated that the House saw the Senate attempting to manipulate legislation in its favor. The House also wanted to delegate authority to local public bodies, defining the Congress as a regulatory authority.

The history behind passage of the Housing Act of 1937, reveals the three branches of government, committee members and interest groups as contributors to policymaking. The dynamics between and within these political bodies are inherent and adhered to, but sometimes improvised among self-interested individuals and public advocates. Passing the bill into law would have been a reckless action without tuning it down first as the executive branch and the house had done.

PART V

Memo to Robert C. Weaver, Housing Secretary (1965)

Public Policy

Mr. Secretary, it is my conclusion that the current housing program has “inadequate machinery to attack the special problems of the poor, the unskilled, and the discriminated against...inadequate municipal revenues to provide essential services...a critical shortage of skilled personnel to plan and administer local programs...and a lack of coordinated programs to solve effectively regional and metropolitan problems.” (HUD 1965 p.4) At this point the historical and alternative costs to the public outweigh the meager benefits gained from this program. Less reliance must rest on the government in management, construction, leasing and maintenance of the housing stock. Our department should strictly provide subsidies and set standards for private and non-profit local bodies to do this work.

Our objective is to secure each individuals right to accessible, decent housing. Should we fall short of attaining this goal in the long term, it is inconceivable that America shall develop into a country of stable communities from which future generations of hardworking, successful individuals will emerge and retire in peace. A decent home is an important life investment, an indicator of financial capability, and a base to provide for self [...] government is already attentive of the fact that, for many poor individuals, the gap between the desire to [own?] and actual opportunity is widening, despite past government attempts to aid crumbling communities. We [thought?] public housing provision was the answer, but it has not been effective enough. However, we are empowered [to] correct the shortfalls of the existing program, expand [it] and complement it with feasible alternatives.

Many of the working poor are living in substandard housing; nearly eleven million to date. They are in urban ghettos and rural communities across the country; most are comprised of minority, disabled, immigrant, elderly and veteran populations. Many are young couples with children. For a variety of reasons they are unable to purchase homes in the private market. What this department must do, Mr. Secretary, where housing is concerned, is become aware of the details of market failures and develop methods to alleviate their effects through an equitable and efficient set of programs.

I firmly believe that the gravest mistake would be to continue public housing provision strictly through the use of government regulated local public housing authorities funded by bond issues. In this way, we have overlooked better solutions by overlooking a major cause of the problem. The working poor suffer from gender, race, age and ethnic discrimination in housing and employment markets.

They are unable to obtain mortgage loans because of too rigid qualifying criteria based on income, savings and employment histories. Private development in these communities is avoided because it won't yield profits.

These problems will persist if government only becomes a surrogate housing provider. The poor will have no incentive or opportunity to become economically mobile, and their communities will not improve unless the private sector has incentives to invest in them.

These communities will suffer further internal and external decay; families and schools will decline; employment networks will disappear; local services will diminish with dwindling tax bases; legal and business representatives and job-training centers will close their doors.

The solution is to wed the working poor and private industry through a mutually satisfying process, and to reconnect the working poor to the mainstream of economic life. A successful set of programs must do the following:

- (1) Allow eligible poor the option of being tenants or homeowners;
- (2) Allow the poor to earn and save more money to engage in general market activities;
- (3) Allow them to find better jobs as their lives become consistently stable;
- (4) Result in reductions in crime, family abuse and neglect;
- (5) Alleviate weariness and disenfranchisement;
- (6) Increase neighborhood property values and alleviate negative externality effects on surrounding neighborhoods;
- (7) Invite business and increase local revenues;
- (8) Attract legal and political representation to combat discrimination;
- (9) Bolster the supply and demand sides of the local markets for goods and services and labor in these areas;
- (10) Invite brokers, bankers, construction companies, and private and non-profit development firms into the process through a system of subsidies and loan guarantees.

Alternatives to the Existing Program

I present the following as reasonable alternatives to the existing program:

1. The first alternative is to “modify the public housing program so that local housing authorities may purchase or lease existing housing or privately built new housing for the use of low-rent tenants.” (HUD 1965 p.7) Senior finance staff members have projected the cost to be \$423 million for the provision of 795,000 units in one year. Notably, the public costs would diminish with the need of public housing authorities to build new units. Our department must deal with private firms to control their costs, giving them subsidies to build and renovate under regulatory agreement.
2. Another alternative is a rent supplement program. It is projected that this program can generate 375,000 privately built units over the next four years at a much lower cost to the public. The incentive would be construction subsidies and guaranteed rent payments that would cover maintenance costs. This program could be an alternative provision for families earning less than \$4,000 per year and for those on public-housing waiting lists. (HUD 1965 p.7) Tenants can pay a small percentage of their income, as in the public housing program. The shift in maintenance responsibility from the local PHA to the private firm is a feasible and cost-efficient adjustment in at least a few areas.

3. The first two options focus on public and private sector tradeoffs between the dimensions of cost and management of rental units. But there is yet another dimensional boundary that must be breached: the obstacles to homeownership faced by the working poor. We can feasibly extend FHA mortgage insurance to many of them. We can devise “special mortgage terms designed to help channel funds to housing within the reach of lower income families who would otherwise be unable to purchase a home.” It is reasonable to believe that “FHA insured mortgages with a lower downpayment and a corresponding higher risk than for higher-income earning families borrowing with larger mortgages...would channel credit to lower-income families. (Semer p.22) This would effectively separate low-income earners who can afford to purchase in the private market from those who must rely on low-rent programs. The homeowner would be given responsibility for the maintenance of the unit rather than a development firm or public housing authority.

All of these program alternatives have merit and they should be implemented wherever appropriate. It is an intelligent and refined combining of them that will yield the most equitable results. The strength of these programs is that they are tailored to specific needs of different communities and consider the limits of private and public sector involvement.

Requirements for Successful Intervention

Successful intervention can only come about if we do the following:

1. We must devise a uniform system of income-eligibility standards. Federal and local government agencies currently have different calculation methods, for different people, in different areas, and for different programs to determine low-rent housing eligibility. This creates confusion and inequity.
2. If we authorize local public housing authorities to purchase or lease private developments there is a danger that housing units purchased will have used “more capital relative to current expenditures in the projects if [the local authority] would have developed itself.” (Weicher p.16) We must take measures to bring those costs under control.
3. We must provide for homeowner maintenance-aid packages to prevent defaults on mortgages.

If we adhere to the suggestions made here, I believe we can improve the status of communities both fairly and efficiently.

ADDENDUM

Addendum: Reading the Papers Together

Commentary prepared for this edition

[Editor's note: This addendum is commentary added to the publication edition. The five papers above appear exactly as written; nothing in this section is part of the 1993 manuscript.]

Purpose

The five papers were written for different courses, in different registers: a case study, a statistical exercise, a development analysis, a legislative history and a policy memorandum. Read in sequence, however, they ask one question from five directions: what does it take for a plan to survive contact with a real place? The commentary below takes each paper in turn and then draws out the threads that connect them.

Part I: Design as a Chain of Reasonable Decisions

The strength of the Farmers Market case study is its chronology. The project began as a modest plan to move a row of outdoor tables to a more visible site. A retail consultant then observed that a food court would command roughly \$40 per square foot against \$18 for farm stalls, and the scope grew accordingly. Each addition was defensible when it was made. The paper's diagnosis, that the team could not make its debt financing, revenue stream and available space "fit", is the real finding: a design can be sound in every part and still fail as a whole when the parts are decided one at a time.

The paper is also candid about the forces no drawing could correct: a mid-block site, a lane that patrons did not feel was safe, and a liquor-license rule that cost the project an anticipated restaurant. Readers should keep in mind that the account rests on a single interview with the project's design director, and so reflects the designers' own view of what went wrong.

Part II: The Reasoning Behind the Numbers

The statistical project is best read for its method rather than its coefficients. The author does not remove variables because they are inconvenient; each removal is argued. Population is redundant once density is in the model, and is expressed in different terms from the other variables. "Percent non-white" lumps together groups that census data would normally keep apart. The poverty measure depends on how households identify themselves, which the author reasonably calls a shaky basis for measurement. The tests that follow are then used to confirm, not to justify, those judgments.

The author is equally direct about limits. The data describe 1973, the model is cross-sectional, and a time-series study of individual cities would be the natural next step. Readers should also note that the complete full-sample printout for the final model is not part of the manuscript; its results are known from the worked tests recorded in Appendix A.

Part III: The Same Market, Seen from the Outside

Where Part I looks inward at design decisions, Part III looks outward at the partnership that made the market possible: city, state and federal agencies, two banks and a non-profit development corporation, with funding the paper itemizes. Read beside Part I, the two papers capture the project at different moments. Part III describes a market still awaiting its November opening, with tenants being signed and incentives on offer; Part I describes the same market after the problems had appeared.

The paper's own questions are among its most valuable passages. It asks whether the amenities offered to tenants are a short-cut for development, notes that businesses will want protection for their investment, and records the complaint of South Jamaica residents that they do not benefit directly from downtown projects. Its closing confidence that no conflicting principles threatened the project sits in productive tension with those doubts.

Part IV: Lawmaking as a Process with Its Own Logic

The Housing Act narrative treats legislation as something that happens to ideas, not merely something that carries them out. A court decision narrowed what Congress could do, a senator pursued economic recovery rather than housing as such, and a coalition of supporters attached many different purposes to one bill. The paper's central observation is that this breadth was both a strength and a weakness: it built support, but it left the bill's objectives unclear until revision forced clearer ones. The result, in the author's account, is a law shaped as much by compromise between institutions as by any single design.

Part V: From Provider to Enabler

The 1965 memorandum makes a single argument and tests it against three options. Its premise is that government should concentrate on subsidies and standards while private and non-profit bodies build and manage housing, because the barriers facing the working poor, such as discrimination, rigid lending criteria and the absence of private investment, will persist if government simply replaces the market. The three alternatives are well chosen because each addresses a different tradeoff: public cost, management responsibility and the obstacles to ownership. The closing requirements, notably a uniform system of eligibility standards, show an awareness that good programs can still fail through inconsistent administration.

Threads Across the Papers

Three themes recur. First, money and design cannot be separated: the market's troubles began where the financing and the building stopped matching. Second, perception counts as much as reality: patrons' sense that the walkway was unsafe was as damaging as any physical defect. Third, partnership is both the method and the risk. The market depended on public and private actors working together, the memorandum proposes the same arrangement for housing, and the Housing Act shows how many interests must be reconciled before such an arrangement can exist at all.

Together the papers suggest that the most useful question to ask of any urban plan is not only whether it is well designed, but who pays for it, who must approve it, and who will feel safe using it.

APPENDIX A

Variables, Program and Worked Tests

Statistical Data Analysis · Endterm Project · July 13, 1993

This appendix assembles the working materials of the endterm project: the definitions of the variables, the SPSS/PC+ command listing, and the hypothesis tests worked out by hand for Model One and Model Two. Output produced by the program is reproduced in Appendices B and C; the reported results are summarized in Appendix D; and Appendix E records every verification and correction made in preparing this edition.

A.1 Variables and Models

Table A.1. Variables used in the analysis

Symbol	Definition	Role
E	Normal expenditures, per capita, 1973–74	Dependent variable
P	Population in millions, 1973	Model One only
DI	Disposable income, per capita, 1973	Models One and Two
POV	Percent of households with 1973 disposable income below \$5,000	Model One only
NW	Percent of population non-white, 1973	Model One only
DEN	Persons per square mile, in thousands	Models One and Two
GR	Intergovernmental revenues, per capita (normal functions)	Models One and Two

Model One regresses E on P, DI, POV, NW, DEN and GR (six independent variables, N = 30 cities). Model Two regresses E on DI, DEN and GR only. The expected sign of each coefficient (the prior) is positive for DI, DEN and GR in Model Two.

A.2 SPSS/PC+ Program

```
set run=auto/screen/off/list='x'/list.
title james theard endterm.
import file='a:pcitep5'.
sort cases by (a).
list var=gr.

regression descriptives/
  vars=e p di pov nw den gr/
  statistics=r coeff anova tol/
  dep=e/
  enter p di pov nw den gr/residuals=durbin.

regression descriptives/select gr lt 98.81/
  vars=e p di pov nw den gr/
  statistics=r coeff anova tol/
  dep=e/
  enter di den gr/residuals=durbin.
```

The first regression estimates Model One on all 30 cases. The second estimates the three-variable model on the 12 cases with GR below 98.81, the lower sample used in the Goldfeld–Quandt test (Section A.5). The command for the upper sample (GR above 119.73) does not appear in the manuscript listing; its output is reproduced in Appendix C.

A.3 Model One: Worked Tests

Priors: P, DI, POV, NW, DEN, GR.

F-test. $H_0: b_1 = b_2 = b_3 = b_4 = b_5 = b_6 = 0$; $H_1: b_1 \dots b_6 \neq 0$. $F(\text{calc}) = 13.70130$; $F(\text{crit}) = F_{.05, 6, 23} = 2.53$. Since $13.70130 > 2.53$, reject H_0 : the model is good.

t-tests. $t(\text{crit}) = 1.714$. As written on the worksheet:

Table A.2. Model One t-tests, as recorded on the worksheet

Variable	t (worksheet)	Decision	Printout t (Table B.5)
P	1.468	Insignificant	-1.468
DI	1.879	Significant	1.879
POV	-.534	Insignificant	.534
NW	.770	Insignificant	.770
DEN	2.944	Significant	2.544
GR	3.957	Significant	3.952

Worksheet entries are reproduced as written. Differences from the computer printout are noted in Appendix E.

Multicollinearity. Tolerances: P = .389, POV = .439, DI = .319, DEN = .318. The low tolerances indicate the presence of multicollinearity. Correlations: $r(\text{P}, \text{DEN}) = .670$; $r(\text{DI}, \text{POV}) = -.676$; $r(\text{DEN}, \text{DI}) = -.641$ (worksheet).

A.4 Model Two: Worked Tests

Priors: DI (+), DEN (+), GR (+).

F-test. $H_0: b_1 = b_2 = b_3 = 0$; $H_1: b_1, b_2, b_3 \neq 0$. $F(\text{crit}) = 2.99$ ($\alpha = .05$, 3 and [26] degrees of freedom; the denominator is not legible in the manuscript and is reconstructed as $n - k - 1$); $F(\text{calc}) = 27.25$. Since $27.25 > 2.99$, the model is good.

t-tests. $t(\text{crit}) = 1.706$ ($\alpha = .05$, $n - k - 1 = 26$ degrees of freedom). GR: $t = 5.121$; DEN: $t = 2.744$; DI: $t = 1.948$. All are significant.

Multicollinearity. Tolerances: DI = .57; DEN = .57; GR = .81. Multicollinearity is no longer a problem.

A.5 Goldfeld–Quandt Test for Heteroscedasticity

The 30 observations were ordered by GR. The lower 40% (12 cases), the middle 20% (6 cases, omitted) and the upper 40% (12 cases) define the two samples. Table A.3 lists the ordered values.

Table A.3. Observations ordered by GR

#	GR	Group	#	GR	Group	#	GR	Group
1	30.61	Lower 40%	11	89.88	Lower 40%	21	141.54	Upper 40%
2	38.68	Lower 40%	12	97.38	Lower 40%	22	151.90	Upper 40%
3	39.75	Lower 40%	13	98.81	Middle 20%	23	152.24	Upper 40%
4	60.50	Lower 40%	14	104.95	Middle 20%	24	160.21	Upper 40%
5	61.12	Lower 40%	15	106.45	Middle 20%	25	169.32	Upper 40%
6	64.09	Lower 40%	16	111.99	Middle 20%	26	184.56	Upper 40%
7	73.54	Lower 40%	17	116.68	Middle 20%	27	193.38	Upper 40%
8	75.80	Lower 40%	18	119.73	Middle 20%	28	195.63	Upper 40%
9	81.11	Lower 40%	19	126.66	Upper 40%	29	548.89	Upper 40%
10	89.85	Lower 40%	20	136.98	Upper 40%	30	680.31	Upper 40%

The values 89.85 and 89.88 are given in the manuscript in the order 89.88, 89.85, with the second marked unclear; they are shown here in ascending order. The 18th value (119.73) appears in the manuscript as 119.78; see Appendix E.

H_0 : $ESS(\text{upper}) = ESS(\text{lower})$; H_1 : $ESS(\text{upper}) \neq ESS(\text{lower})$. $F(\text{crit}) = F_{.05,8,8} = 3.44$. $F(\text{calc}) = ESS(\text{upper}) / ESS(\text{lower}) = 64860.35864 / 21943.85671 = 2.96$. Since $2.96 < 3.44$, accept H_0 : there is no heteroscedasticity in the revised model.

APPENDIX B

SPSS/PC+ Output: Full Sample (N = 30)

Model One · Multiple Regression · July 13, 1993

Dependent variable: E, normal expenditures, per capita. Method: Enter. Variables entered: P, DI, POV, NW, DEN, GR. Listwise deletion of missing data; N of cases = 30.

B.1 Descriptive Statistics

Table B.1. Descriptive statistics, full sample

Variable	Mean	Std. Dev.	Label
E	296.173	137.876	Normal expenditures, per capita, 1973–74
P	1.101	1.395†	Population in millions, 1973
DI	5355.800	596.356	Disposable income, per capita, 1973
POV	.161	.044†	Percent households with 1973 DI < \$5000
NW	.179	.119	Percent population non-white, 1973
DEN	7.593	5.807	Persons per square mile, thousands
GR	143.249	136.910	Intergovernmental revenues, per capita

† Corrected from the manuscript values (1.305 and .064); see Appendix E.

B.2 Correlation Matrix

Table B.2. Correlation matrix, full sample

	E	P	DI	POV	NW	DEN	GR
E	1.000	.218	.644	−.382	.150	.657	.752
P	.218	1.000	.374	.015	.235	.670	.026
DI	.644	.374	1.000	−.676	−.051	.641	.385
POV	−.382	.015	−.676	1.000	.186	−.341	−.220
NW	.150	.235	−.051	.186	1.000	−.341	.152
DEN	.657	.670	.641	−.341	−.341	1.000	.385
GR	.752	.026	.385	−.220	.152	.385	1.000

B.3 Model Summary and Analysis of Variance

Table B.3. Model summary

Statistic	Value
Multiple R	.88396
R Square	.78139

Statistic	Value
Adjusted R Square	.72436
Standard Error	72.38747

Table B.4. Analysis of variance

Source	DF	Sum of Squares	Mean Square	F / Signif F
Regression	6	430764.47318	71794.07886	13.70130
Residual	23	120518.74549	5239.94546	.0000
Total†	29	551283.21867		

† Total computed as the sum of the regression and residual components.

B.4 Variables in the Equation

Table B.5. Coefficients, Model One

Variable	B	SE B	Beta	Tolerance	VIF	T	Sig T
GR	.471857	.119405	.468551	.676108	1.479	3.952	.0006
P	−22.676345	15.443566	−.229419	.389352	2.568	−1.468	.1556
POV	243.979392	456.887101	.078455	.439362	2.276	.534	.5985
NW	93.637550	121.558389	.080760	.864755	1.156	.770	.4490
DI	.074971	.039895	.324275	.319218	3.133	1.879	.0729
DEN	10.428245	4.099874	.439240	.318734	3.137	2.544	.0182
(Constant)	−283.083926	255.716002				−1.107	.2797

B.5 Residual Statistics

Table B.6. Residual statistics, full sample

Statistic	Min	Max	Mean	Std. Dev.	N
*PRED	96.4097	686.7139	296.1733	121.8768	30
*RESID	−162.8597	136.3860	.0000	64.4656	30
*ZPRED	−1.6391	3.2044	.0000	1.0000	30
*ZRESID	−2.2498	1.8841	.0000	.8906	30

Total cases = 30. Durbin–Watson test = 2.44883.

APPENDIX C

SPSS/PC+ Output: Goldfeld–Quandt Subsamples

Three-variable model (DI, DEN, GR) · July 13, 1993

The three-variable model (Model Two specification) was estimated separately on the 12 cases with the lowest GR values and the 12 cases with the highest GR values. The residual sums of squares from these two regressions supply the test statistic reported in Section A.5. Dependent variable: E. Method: Enter. Variables entered: GR, DEN, DI.

C.1 Lower Sample: GR < 98.81 (N = 12)

Table C.1. Descriptive statistics, lower sample

Variable	Mean	Std. Dev.	Label
E	209.758	57.911	Normal expenditures, per capita, 1973–74
P	.879	.628	Population in millions, 1973
DI	5102.250	515.902	Disposable income, per capita, 1973
POV	.163	.039	Percent households with 1973 DI < \$5000
NW	.160	.146	Percent population non-white, 1973
DEN	3.870	2.258	Persons per square mile, thousands
GR	66.785	21.745	Intergovernmental revenues, per capita

Table C.2. Correlation matrix, lower sample

	E	P	DI	POV	NW	DEN	GR
E	1.000	.042	.360	−.309	.260	.593	.283
P	.042	1.000	.181	.071	.039	.199	−.094
DI	.360	.181	1.000	−.644	−.054	.228	−.635
POV	−.309	.071	−.644	1.000	−.321	−.059	−.312
NW	.260	.039	−.054	−.321	1.000	.104	−.191
DEN	.593	.199	.228	−.059	.104	1.000	.209
GR	.283	−.094	−.635	−.312	−.191	.209	1.000

Table C.3. Analysis of variance, lower sample

Source	DF	Sum of Squares	Mean Square
Regression	3	14946.87246	4982.29082
Residual	8	21943.85671	2742.98209
Total	11	36890.72917	

Multiple R = .63653; R Square = .40517; Adjusted R Square = .18210; Standard Error = 52.37349; F = 1.81638; Signif F = .2222.

Table C.4. Coefficients, lower sample

Variable	B	SE B	Beta	Tolerance	VIF	T	Sig T
GR	.088198	.943110	.033118	.592885	1.687	.094	.9278
DEN	13.754977	7.208382	.536366	.941082	1.063	1.908	.0928
DI	-.024306	.039927	-.216531	.587724	1.701	-.609	.5596
(Constant)	26.622907	170.055298				.157	.8795

Table C.5. Residual statistics, lower sample

Statistic	Min	Max	Mean	Std. Dev.	N
Selected: GR < 98.81					
*PRED	166.7186	302.9219	209.7583	36.8620	12
*RESID	-74.1084	86.4150	.0000	44.6643	12
*ZPRED	-1.1676	2.5274	.0000	1.0000	12
*ZRESID	-1.4149	1.6500	.0000	.8528	12
Unselected: GR ≥ 98.81					
*PRED	158.5879	556.9495	316.6193	99.0257	18
*RESID	-146.2397	409.2293	37.1640	112.8574	18
*ZPRED†	-1.3881	4.9187	2.8989	2.6864	18
*ZRESID	-2.7922	7.8137	.7096	2.1549	18

† Recomputed from the *PRED row and the selected-case mean and standard deviation; the manuscript values were -1.3382, 4.9187, 2.8898 and 2.1524. See Appendix E.

C.2 Upper Sample: GR > 119.73 (N = 12)

Table C.6. Descriptive statistics, upper sample

Variable	Mean	Std. Dev.	Label
E	392.125	162.396	Normal expenditures, per capita, 1973–74
P	1.266	2.025	Population in millions, 1973
DI	5638.000	577.565	Disposable income, per capita, 1973
POV	.150	.103	Percent households with 1973 DI < \$5000
NW	.179	.103	Percent population non-white, 1973
DEN	10.670	6.401	Persons per square mile, thousands
GR	236.454	180.137	Intergovernmental revenues, per capita

Table C.7. Correlation matrix, upper sample

	E	P	DI	POV	NW	DEN	GR
E	1.000	.204	.705	-.436	.101	.524	.673
P	.204	1.000	.358	.221	.397	.790	-.044

	E	P	DI	POV	NW	DEN	GR
DI	.705	.358	1.000	-.584	-.066	.591	.246
POV	-.436	.221	-.584	1.000	.742	-.167	-.224
NW	.101	.397	-.066	.742	1.000	.125	.345
DEN	.524	.790	.591	-.167	.125	1.000	.174
GR	.673	-.044	.246	-.224	.345	.174	1.000

Table C.8. Analysis of variance, upper sample

Source	DF	Sum of Squares	Mean Square
Regression	3	225236.62386	75078.87462
Residual	8	64860.35864	8107.54483
Total†	11	290096.98250	

Multiple R = .88115; R Square = .77642; Adjusted R Square = .69258; Standard Error = 90.04191; F = 9.26037; Signif F = .0056. † Total computed as the sum of the regression and residual components.

Table C.9. Coefficients, upper sample

Variable	B	SE B	Beta	Tolerance	VIF	T	Sig T
GR	.476035	.155580	.528039	.938386	1.066	3.060	.0156
DEN	3.585986	5.264014	.141335	.649280	1.540	.681	.5150
DI	.138271	.059256	.491765	.629263	1.589	2.333	.0479
(Constant)	-358.272716	301.102033				-1.788‡	.1116

‡ As printed in the manuscript; $B \div SE B$ gives -1.190. See Appendix E.

Table C.10. Residual statistics, upper sample

Statistic	Min	Max	Mean	Std. Dev.	N
Selected: GR > 119.73					
*PRED	185.7089	727.2814	392.1250†	143.0946†	12
*RESID	-115.8163	144.7314	.0000	76.7880†	12
*ZPRED	-1.4425	2.3422	.0000	1.0000	12
*ZRESID	-1.2862	1.6074	.0000	.8528	12
Unselected: GR ≤ 119.73					
*PRED	45.7946	416.0026	234.7518	91.9202	18
*RESID	-168.9026	132.3054	-2.5463	79.7504	18
*ZPRED	-2.4203	.1669	-1.0998	.6424	18
*ZRESID	-1.8758	1.4694	-.0283	.8857	18

† Not legible in the manuscript; derived from the adjacent printed output (the mean of *PRED equals the mean of E; standard deviations follow from the analysis of variance). See Appendix E. Multiple R, selected cases = .88115; unselected cases = .53501. Durbin-Watson: selected cases = 2.44760; unselected cases = 1.86102.

APPENDIX D

Summary of Reported Test Results

Models One and Two · July 13, 1993

Table D.1 collects, in one place, the test results reported in the text of the project and on the worksheets in Appendix A. All figures are the author's; none has been re-estimated. Autocorrelation was not tested because the data are cross-sectional rather than a time series.

Table D.1. Reported tests

Model	Test	Result	Critical value	Decision
One (6 variables)	Overall F	F = 13.70130	2.53 (F.05,6,23)	Reject H_0 ; model good
One	t-tests	DI, DEN, GR significant; P, POV, NW insignificant	1.714	Remove P, NW, POV
One	Multicollinearity	TOL: P .389, POV .439, DI .319, DEN .318	—	Present
Two (DI, DEN, GR)	Overall F	F = 27.25	2.99	Reject H_0 ; model good
Two	t-tests	GR 5.121; DEN 2.744; DI 1.948	1.706	All significant
Two	Multicollinearity	TOL: DI .57, DEN .57, GR .81	—	Not a problem
Two	Goldfeld–Quandt	F = 64860.35864 / 21943.85671 = 2.96	3.44 (F.05,8,8)	Accept H_0 ; homoscedastic

APPENDIX E

Editorial and Verification Notes

Record of corrections, derivations and open items

Each regression table in Appendices B and C was checked against the identities that SPSS output must satisfy: sums of squares and degrees of freedom against R^2 , adjusted R^2 , F and the standard error; $B \div SE\ B$ against t; the t distribution against Sig T; $1 \div \text{Tolerance}$ against VIF; $B \times SD(x) \div SD(E)$ against Beta; and *PRED, *RESID, *ZPRED and *ZRESID against one another. All three correlation matrices were confirmed to be symmetric. Items that did not reconcile, and the treatment of each, are listed below.

Table E.1. Corrections, derivations and open items

#	Item	Treatment
1	Goldfeld–Quandt worksheet gives ESS values 6440.35864 and 21943.85711.	Corrected to 64860.35864 and 21943.85671, the residual sums of squares in Tables C.8 and C.3. These give $F = 2.956$, the reported 2.96.
2	Ordered GR list shows 119.78 as the 18th value.	Shown as 119.73, the selection cutoff used in the program; this yields the 12 upper cases ($N = 12$) reported.
3	Full-sample standard deviations printed as 1.305 (P) and .064 (POV).	Replaced by 1.395 and .044, the values implied by the printed Beta coefficients ($\text{Beta} = B \times SD(x) \div SD(E)$). All other full-sample standard deviations reconcile.
4	ZPRED row for unselected cases in Table C.5 (−1.3382, 4.9187, 2.8898, 2.1524) is inconsistent with the *PRED row.	Recomputed as −1.3881, 9.4187, 2.8989 and 2.6864.
5	Mean and standard deviation of *PRED and standard deviation of *RESID for the upper sample are not legible.	Derived: the *PRED mean equals the mean of E (392.125); the standard deviations equal the square roots of the regression and residual sums of squares divided by 11.
6	Constant in Table C.9: $B = -358.272716$ and $SE = 301.102033$ give $t = -1.190$, but $t = -1.788$ and $\text{Sig } T = .1116$ (which agree with each other) are printed.	Printed values reproduced. Either B or SE B has been misread; the original printout should be consulted.
7	Descriptive standard deviations for POV and NW in the upper sample are both .103; they cannot be checked against the three-variable model output.	Reproduced as transcribed; to be confirmed against the original.
8	Model One worksheet differs from the printout: P t 1.468 (printout −1.468); DEN t 2.944 (2.544); GR t 3.957 (3.952); POV t −.534 (.534); r(DEN, DI) −.641 (.641).	Worksheet reproduced as written in Table A.2; the printout values are used in Table B.5. None of the decisions changes.
9	Denominator degrees of freedom for $F(\text{crit}) = 2.99$ in Model Two is illegible; 2.99 corresponds to about 25 degrees of freedom.	Shown as [26], i.e. $n - k - 1$, consistent with $t(\text{crit}) = 1.706$.
10	Full-sample printout for Model Two (DI, DEN, GR; $N = 30$) is not part of the manuscript.	Not reproduced. Its F, t and tolerance values appear only as the worked results in Section A.4. The three-variable output reproduced here is from the two Goldfeld–Quandt subsamples.
11	Endnotes 22 and 23 are not cited in the text of Part III, which passes from note 21 to note 24; the author's "Milner" in note 8 is "Milder" in note 6.	Numbering retained as in the manuscript; surname made consistent (Milder).

#	Item	Treatment
12	Two pages of the manuscript repeated text from the preceding page (a portion of Part I; the second page of endnotes).	Duplicates removed.
13	Part V: the text breaks mid-sentence between “provide for self” and “government is already attentive...”, and the sentence before “they are unable to obtain mortgage loans” is already complete.	The gap is marked [...]; “they” is capitalized to begin a sentence.
14	Evident typographical errors in the running text.	Corrected: “household, However” to “household. However” (Part II); a doubled phrase in the first sentence of Part IV; “persist of government” to “persist if government” (Part V); “Shbarro’s” to “Sbarro’s” (Part III); “.209.758” to 209.758 (Table C.1).