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National Institute
of Justice

Construction Bulletin

July 1986

Ohio's New Approach to Prison and Jail Financing

By Charles B. DeWitt

The problem

There has never been a greater need for financing construction of correctional facilities. A national survey conducted in 1986 shows that 141 new

State institutions are under construction across the Nation. When renovations are included, a total of 51,932 bedspaces are now being added to the capacity of America's prisons.

The cost of the current effort is estimated at more than \$2.6 billion, and an additional 61,934 bedspaces are being planned for construction in the immediate future.¹

From the Director

The dilemma of too many serious crimes with injured victims and not enough space to incarcerate convicted criminals is a major domestic policy issue. Convicted violent and repeat serious offenders have contributed to swelling prison and jail populations, which outstrip capacity in many jurisdictions. Given today's fiscal pressures, policymakers face difficult choices. Building and operating prisons are extremely costly. But the price of not expanding capacity also has expensive consequences: increased victims of crime and its attendant fear.

The gravity of the problem is recognized by officials throughout the criminal justice system. In fact, when the National Institute of Justice asked criminal justice officials to name the most serious problem facing the system, police, courts, and corrections officials reached a virtually unanimous consensus: prison and jail crowding is the number one concern.

Attorney General Edwin Meese III has spoken out repeatedly on the dimensions of the crisis and the need to help State and local jurisdictions find less costly ways to increase corrections capacity so convicted serious criminals are prevented from preying on people, communities, and our economy.

Responding to the need voiced by practitioners and the policy statements of the Attorney General, the National Institute of Justice has launched a new corrections construction initiative to help State and local officials make informed decisions on building or expanding facilities. The program was announced by the Attorney General at the National Sheriffs' Association 1986 Criminal Justice Symposium.

These *Construction Bulletins*, as a series, are designed to share information on advanced construction techniques that hold the potential for saving both time and money in the construction of safe and secure facilities.

This particular *Bulletin*, however, focuses on a different set of new techniques: Alternatives to traditional municipal bonds as a method for raising the money for new construction. Our case study is Ohio, where \$79 million in lease-purchase securities were sold to finance prison construction and, later, another \$25 million for county jails across the State.

In addition to the *Bulletins*, the National Institute of Justice is publishing a *National Directory of Corrections Construction*, based on the results of a national survey, which provides a

wealth of information on construction methods and costs for jails and prisons built since 1978. The National Institute will also maintain, at our National Criminal Justice Reference Service, a computerized data base on corrections construction. Through this *Construction Information Exchange*, those planning to build or expand facilities will be put in touch with officials in other jurisdictions who have successfully used more efficient building techniques.

Surveys indicate that an estimated 95 percent of those in prison in 1979 were repeat or violent offenders. We know from research that repeat offenders are responsible for a large portion of the serious crime that plagues our communities. We also know that prisons do work: while in prison an offender cannot commit additional crimes against innocent victims. If we can drive down the excessive costs of building—and of financing those costs—State and local officials will be in a better position to provide the additional jail and prison space they need to incapacitate those who victimize again and again.

James K. Stewart
Director
National Institute of Justice

State and local agencies are caught between increasing costs of government and limited sources of revenue. Cities and counties must work hard to balance their annual operating budgets, and few units of local government can now afford to finance construction of jails with cash. At the State level, the size and cost of correctional institutions often leave officials confronting financial conditions comparable to those faced by their colleagues in local government.

In all but rare examples, modern jails and prisons are financed through borrowing. Officials recognize that cash or "pay as you go" would avoid costly interest payments, but most State and local governments do not have sufficient reserves for major capital expenditures. Since most correctional institutions in the future will be built with debt financing, the critical question is: What is the best way to borrow the funds?

This *Bulletin* discusses the choice made by Ohio. After careful review of several alternatives, Ohio rejected traditional finance methods and decided upon an innovative form of municipal bond to finance construction of prisons.

Traditional finance methods

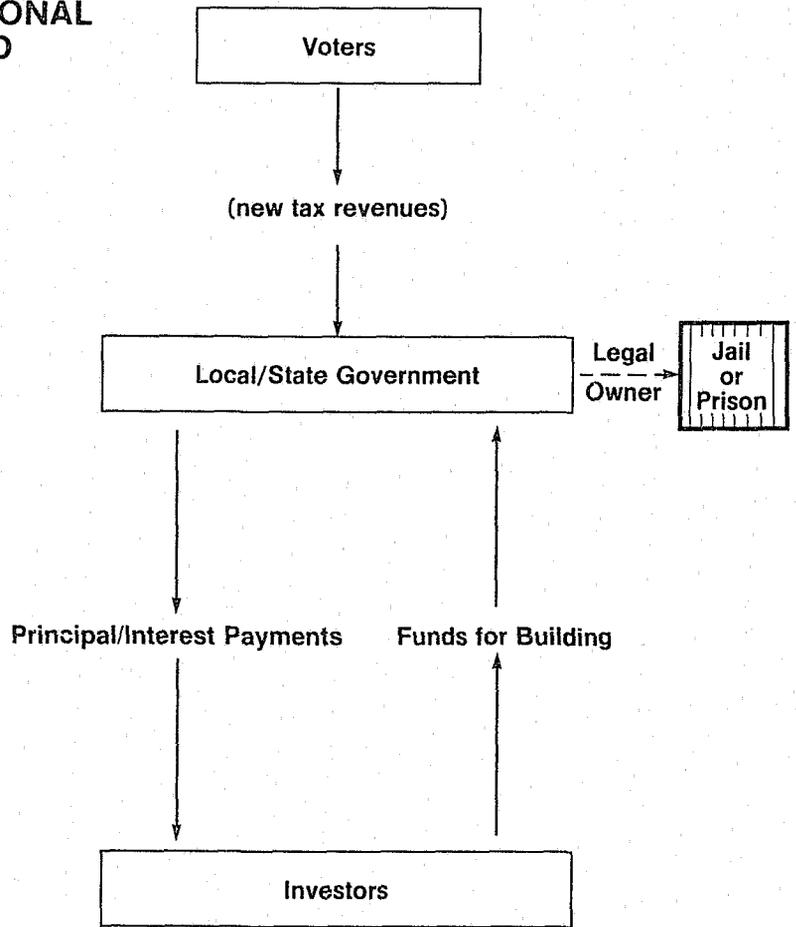
Public resistance to tax increases has made construction finance more difficult than ever before. In the past, general obligation bonds have been considered the most desirable type of debt instrument, from the perspectives of both issuer and investor. This approach is depicted in Figure A.

General obligation bonds are distinguished from other securities by their pledge of "full faith and credit" from the issuing State or local government. Investors are assured that both interest and principal will be repaid because the debt is a binding obligation, backed by the taxing power of a government agency. The traditional approach for both local and State governments has been to pledge taxes to make interest payments to bond holders.

A "taxpayers' revolt" has caused the decline of conventional finance techniques, as many agencies are no

Figure A

TRADITIONAL METHOD



Interest payments for general obligation bonds are generally backed by taxes.

longer allowed to commit taxes without approval by the voters. While the impact on States has been less severe, very few local agencies have been able to secure voter approval for the property tax increases needed to make payments on general obligation bonds.

Conventional methods of construction financing are often blocked by one or more of the following obstacles:

- **Debt capacity:** Like many jurisdictions, the State of Ohio has reached the maximum limit of bonded indebtedness permitted by law. This is a common problem as most State and local governments have either a statutory or constitutional ceiling imposed on public debt. The debt limit legally restricts or "caps" borrowing by general obligation bonding.

- **Taxing authority:** In recent years, many units of local government have been stripped of their legal authority to increase ad valorem (property)

taxes. Through voter initiatives and State legislation, many cities and counties have been prevented from raising taxes without approval by the voters.

- **Tax base:** Even in jurisdictions permitted to raise ad valorem taxes, practical limits may preclude further taxation. After years of borrowing, many cities and counties may have maximized the taxing capacity of property in their jurisdictions. A comparison to other counties may show that increased property taxes would be excessive, as all real property has already been fully appraised and taxed.

- **Budget allocation:** Annual operating budgets are rarely a source of funding for jail and prison construction. If revenues are frozen by a cap on property taxes, counties may already find it difficult to keep pace with inflation. When a new facility is planned, elected officials are also

Facts about municipal bonds

State and local governments may raise money for constructing correctional institutions by selling securities in the bond market. Most securities issued by public agencies are called municipal bonds. Compared to the stocks and bonds issued by private companies, municipal bonds offer investors an attractive combination of safety and tax-exempt income.

These securities usually offer stability and security that cannot be matched by the stocks and bonds issued by private companies. While a private company may lower or eliminate dividend payments at any time, interest payable by State and local governments represents a legal commitment. Similarly, municipal bonds offer a promise of return of the invested cash on their date of maturity; private-sector stocks provide no such assurances.

In addition to the safety of the investment, municipal bonds also offer tax-exempt income. As an obligation of State or local government, these securities are exempt from Federal taxes, and generally exempt from State and local income taxes as well. For investors who desire tax savings, this feature represents a significant benefit available only from municipal bonds.

mindful that it is the annual budget that must bear the burden of personnel and operating costs. For most agencies, commitment of sufficient funding to retire the construction debt would require substantial cuts in the annual operating budget or depletion of emergency reserves.

• **Special elections:** When put to the test of an election, voters often refuse to authorize increased taxes for jail and prison construction. Whether it is a special tax or increased property taxes, the public often looks upon such ballot measures with disfavor. In California, required approval has been established at a two-thirds affirmative vote, and not a single county has secured voter approval for a new jail since the requirement was imposed in 1978.

The Ohio finance method

Ohio's plan for financing prison construction differs from the traditional method in ways that serve as valuable examples for both prisons and jails. The Ohio approach is progressive in two noteworthy respects: Prisons will be leased by the Department of Rehabilitation and Corrections, and the securities carry a variable interest rate. These new funding techniques may offer advantages worthy of consideration by officials now planning construction of new correctional institutions.

Ohio's constitutional debt limit led to creation of the Ohio Building Authority, an agency that finances construction of public facilities by leasing to State and local agencies. Because the Ohio Building Authority cannot pledge the full faith and credit of the State of Ohio, lease bonds are the only type of securities which may be issued.

Costs of borrowing—issuance and interest

Like any consumer who buys with credit rather than cash, an agency that finances construction faces significant costs. As a general rule, financing a jail or prison will cost in total principal and interest payments more than 2 times the actual amount required for construction. For a 20-year fixed rate bond at 8 percent, the cost of a \$10 million jail could actually represent a \$23 million outlay over the duration of the financing period.²

Issuance costs

Costs associated with the bonding process represent additional expenses for the State or local agency. Charges relating to the issuance of securities increase the issue by approximately 2 to 4 percent, and establishing a reserve fund equivalent to 1 year's payments of principal and interest, adds another 15 percent to the total. Altogether, an agency must plan on borrowing 15 to 20 percent more than the cost of the jail or prison. Costs include the following:

- Legal fees
- Printing and distribution of documents
- Credit ratings
- Bond discounts/underwriters fees
- Reserve fund (may be invested).

Interest costs

By far the most significant expense is the cost of interest on the debt.

Twice each year, interest must be paid by the issuing unit of government to investors who purchased the bonds. The total amount of interest over the duration of financing depends ultimately upon several factors:

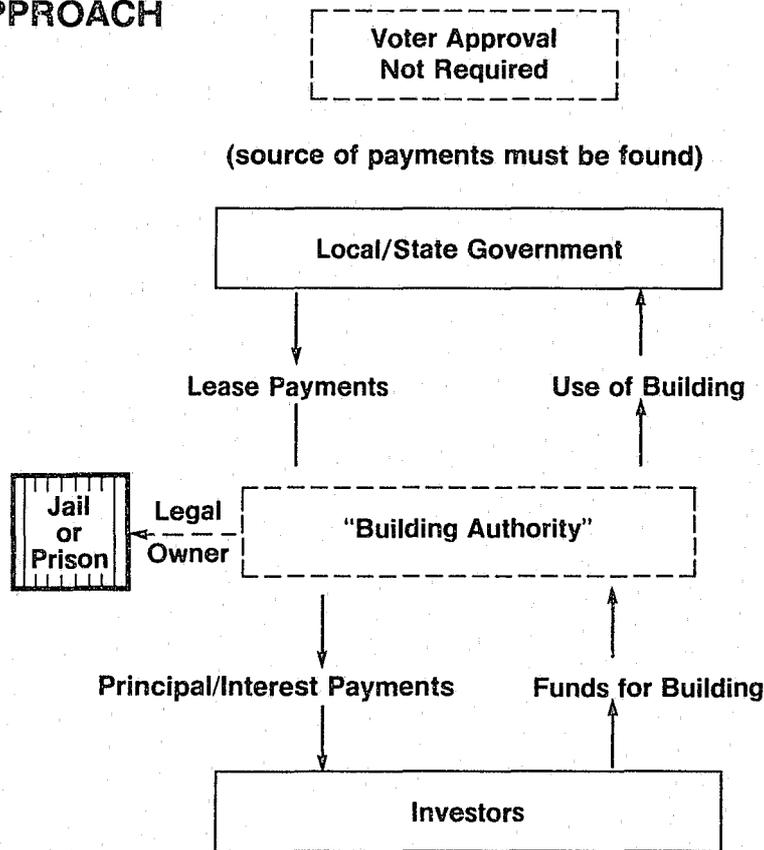
• **Interest rate:** Interest rates in effect at the time securities are issued represent a critical factor. During periods of high interest rates, borrowing is more costly for everyone—from the consumer to a government agency. From 1980 to 1985, interest rates as measured by The Bond Buyer Index of 20 Municipal Bonds varied from a high of 13.44 percent to a low of 7.11 percent.³ Interest rates in 1986 are the lowest since 1979.

• **Repayment schedule:** Although the term or repayment period is generally 20 to 30 years, some agencies have shortened the schedule to reduce interest costs. As with home mortgages, a shorter term may reduce both the interest rate and the cumulative interest cost. Unfortunately, an accelerated schedule requires much larger payments for principal, which many agencies cannot afford.

• **Type of securities:** The specific financial instrument or method of borrowing is the major determinant of interest cost. Unlike the preceding factors that are determined by the economy, selection of the specific security is a matter of choice.

Figure B

NEW APPROACH



Although the Ohio plan was originally developed to finance prison construction, local jurisdictions may also use this framework to build jails.

Lease-purchase financing

The State of Ohio is financing its prison master plan by lease-purchase agreements, illustrated by Figure B. Lease-purchase financing is a method for buying real property and equipment through installment payments. Although technically an installment sale, lease-purchase is based upon a legal arrangement in which the unit of government becomes a tenant in a facility that is nominally owned by another entity.

The agreement is termed a lease because the agency does not actually receive the title to the jail or prison until all required payments are made to the entity who financed the construction. Since a lease-purchase issue is a limited obligation issued on behalf of State or local government, income paid to investors is tax-exempt in

generally the same manner as a general obligation bond. Both are considered to be municipal bonds.

Lease-purchase compared to conventional method

Similarities:

- *Tax-exempt income:* As an obligation of a unit of State or local government, leases are tax exempt. Payments to investors for lease bonds are not subject to Federal taxation and are also generally exempt from taxes in the jurisdiction of issue.
- *Ownership by public:* After completion of all payments, the government entity ultimately acquires title to the facility. This is usually after 20 to 30 years, but may be accelerated by a shorter debt retirement schedule, requiring higher payments.

Differences:

- *Legal agreement:* This arrangement provides for legal ownership by another entity which leases the correctional facility to the unit of government. Many States permit creation of a public building authority for this purpose. The entity may be a public agency, nonprofit firm, or financial institution that legally owns the facility and sells the securities on the bond market. Although the corrections agency controls and operates the facility, the agency is technically a tenant. Since the leasing entity serves only as a nominal owner or "middleman," most rights and liabilities are assigned to a trustee.

- *Annual renewal:* A legislative body must appropriate funds for lease payments, and the lease agreement may be terminated by action of the government agency. This provision is termed the "nonappropriation" clause and legally qualifies the arrangement as a lease.

- *Debt limit:* Since the obligation is renewable each year, the amount borrowed is not categorized as an ongoing legal debt and does not count against debt capacity. Like equipment rental, the facility is leased and not owned, a feature which distinguishes this method from general obligation bonds.

- *Taxing authority:* Lease bonds are not guaranteed with the "full faith and credit" of the city, county, or State. Accordingly, they are not directly backed by the taxing power of the issuing jurisdiction, and general revenues are used to make lease payments.

Issues to be considered

A comparison of Figures A and B shows that arrangements for advanced financing are quite similar to the organizational structure for conventional methods. In both examples, investors purchase a security in the bond market that provides tax-exempt income and a promise to repay the invested cash on the date of maturity. Likewise, proceeds of a lease-purchase issue are used for construction of a new jail or prison in the same manner as general obligation bonds, and both methods permit the unit of government to own the institution "free and clear."

But there are issues inherent in the lease-purchase approach that State and local government must weigh. Here are some of the most important:

Higher cost

Because the lease approach offers less safety than general obligation bonds, a higher rate of return is usually paid to the investors who purchase lease bonds with fixed rates. Lease securities lack the commitment of "full faith and credit," because they are not backed by taxing authority. As a lease, the arrangement also provides that payments may be terminated by the governmental entity, if funds are not appropriated. Together, these factors represent a risk that funds may not be available to make payments.

The higher degree of risk demands a higher rate of interest, thus increasing the cost to governmental entities for lease securities. The interest rate on lease bonds, depending upon the security, usually ranges from one-quarter to one percentage point higher than the rate paid by a unit of government for general obligation bonds.

Since interest payments are the major expense for a government agency,

fixed-rate lease bonds are almost always more expensive than similarly structured general obligation bonds when compared on the same date of issue. However, the risks of lease financing are generally viewed as less significant for correctional facilities when compared to other types of construction such as office buildings and parks, because investors recognize that it is highly unlikely that corrections officials would fail to make an appropriation and abandon their new jail or prison. Moreover, a unit of government taking such action would face extreme difficulty in any subsequent rating of credit.

In the recent past, tax laws have permitted units of government to earn interest on reserve funds. Reserve funds may be created for several purposes, including debt service reserve (to provide funds for 1 year's principal and interest payments) and contingency reserve (to pay for emergencies such as damage by inmates). Federal regulations have limited the total amount to an additional 15 percent, which may be invested in high-yield securities, earning extra income to help offset the interest costs. Depending upon market conditions and prevailing interest

rates, such arbitrage can reduce the net cost of lease-purchase bonds to a level comparable to general obligation bonds.

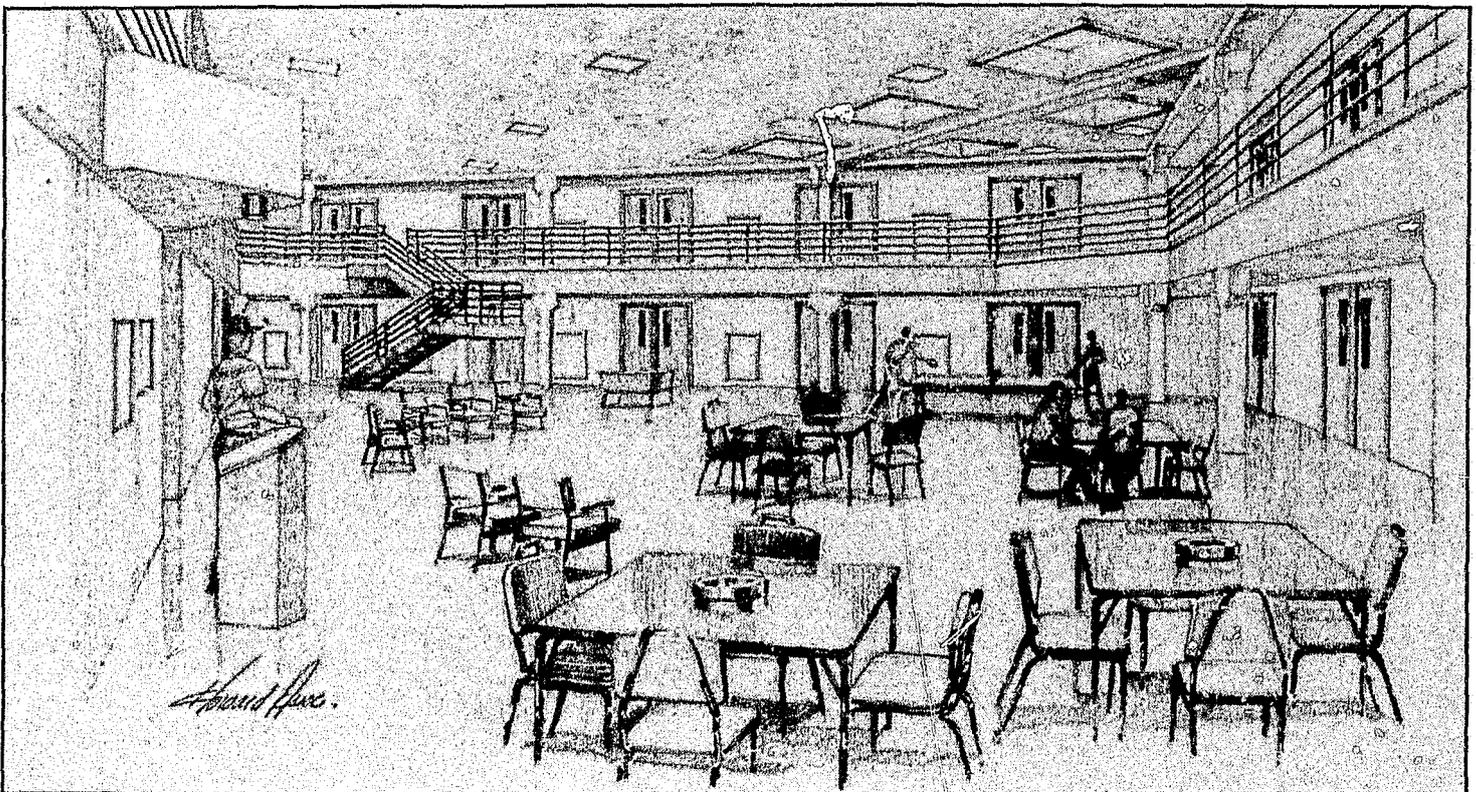
However, the practice of investing reserves for higher earnings may soon be eliminated by a change in Federal tax laws. In 1986, the U.S. Congress is considering legislation to prohibit the arbitrage arrangement. Should such changes be made, fixed-rate lease-purchase bonds would probably cost government agencies significantly more than general obligation bonds on the same date of issue.⁴

Repayment of debt

As shown in Figure B, a key distinction between general obligation bonds and lease-purchase techniques is the difference between *sources* of money used to pay interest and return principal to investors. A leasing entity or building authority simply passes payments from the government agency through to investors.

Lease-purchase methods impose a budget strain upon the governmental entity comparable to conventional methods, but there are usually no new property taxes to cover the interest

Interior of new prison at Chillicothe, Ohio.



payments. Rather, general revenues are pledged, and another source of repayment must be found.

The lease-purchase method does not answer the question of how the government agency will find the funds to make the payments. Without property taxes, officials must either identify an alternative source of revenue or make an allocation from the annual budget of their jurisdiction. Thus, lease-purchase offers opportunities for construction that may be otherwise impossible to finance, but lease methods are viable *only* when officials have identified a source of repayment for the debt.

Jurisdictions now issuing lease securities have developed a number of creative new sources of revenue to take the place of property taxes.

Both California and Kentucky have passed laws that dedicate criminal fines and forfeitures to financing of justice facilities. Many jurisdictions have also used new sales taxes for this purpose. Ohio has committed revenues from inmate industries to secure a portion of the principal and interest due on lease securities.

Timing

A late start on jail or prison construction can be very costly. Both rising interest rates and increased building costs may take a toll on the project budget. Moreover, litigation on crowding may require a swift response, since construction may be ordered by a court.

A vital advantage of lease-purchase is the speed of the process: Funds can often be raised much faster than with conventional methods. How much faster depends upon factors like State laws on leasing and whether an election would be required for general obligation bonds.

Time savings generally range from 4 to 8 months, and 6 months is quite common. This has two impacts on project cost:

- **Bid price.** If construction costs are increasing, an early bid can save a substantial amount. Assuming a modest 5 percent rate of inflation, the cost of a \$10 million project would increase at almost \$42,000 per month.

Because voter approval and legal requirements can delay a general obligation bond by up to 8 months, the bid for a \$10 million jail or prison could increase by more than \$333,000.⁵ For this reason, the 90-day timetable typical for lease-purchase may represent substantial savings.

- **Interest rates.** During periods of rising interest rates, a delay can result in greater interest costs. A \$10 million facility would require an issue of approximately \$11.3 million in securities, costing a State, county, or city about \$1,151,000 per year for initial interest payments (assuming interest at 8 percent). If securities were issued at a later date when rates were just 1 percent higher, the jurisdiction would pay an additional \$87,000 per year for the 20-year duration, or a total of \$1.7 million.⁶

In this way, time savings can have the effect of erasing the extra cost for fixed-rate lease bonds. Lease-purchase securities bear a higher rate of interest than general obligation bonds issued on the same date. However, the costs may be equalized if general obligation bonds are delayed long enough for interest rates to rise to the same level.

Unfortunately, the opposite would be true during a period of declining interest rates, as the gap between more costly fixed-rate lease bonds and conventional methods would grow wider.

Variable-rate financing

Ohio has sold one of the Nation's largest variable-rate issues and the first floating-rate securities for State correctional facilities.

In 1985, the Ohio Building Authority issued \$79 million in floating-rate demand securities, backed by a lease to the Department of Rehabilitation and Correction. A floating rate was evaluated in comparison to conventional methods, and Ohio officials determined that substantial savings could be realized through variable-rate demand bonds.

Table 1 illustrates key features of the Ohio approach. In contrast to traditional fixed-rate financing, Ohio's bonds bear an interest rate that changes every 7 days, according to an index

Table 1

Profile of Ohio finance method

- Type of security: Lease-purchase demand bonds
- Size of issue: \$79,000,000
- Rate on date of issue: 5.15 percent
- Operator/tenant: Ohio Department of Rehabilitation and Correction
- Issuing entity: Ohio Building Authority
- Interest provision: Variable rate, weekly interest adjustment
- Conversion features: Convert to fixed rate; also convert rate adjustments to weekly, monthly, or semiannual periods
- Liquidity: Demand provision permits bond holders to redeem or "put" securities with 1 week notice
- Security: Letter of credit from bank
- Current number of investors: Five institutional buyers
- Unit size: May be subdivided to \$5,000 units, now set at \$100,000
- Date of issue: 4/1/85
- Rating: S&P, P1 + ; Moody, Aaa/VMIG1
- Current rate: (July 7, 1986); 3.95 percent
- Due date: March 1, 2005⁷

of comparable issues. Like a homeowner's adjustable-rate mortgage, Ohio securities pay interest which is raised or lowered according to changes in the economy.

During the year following issuance in April 1985, the rate paid to investors moved down to 4.5 percent, up to 9.0 percent, and back down to 4.8 percent.⁸

Lower costs—Variable-rate securities almost always pay a lower rate of interest than fixed-rate bonds at the time of issue. This can be of substantial benefit, since the amount paid to investors by a governmental entity will generally be less than required by long term fixed-rate bonds.

Officials of the Ohio Building Authority continue to monitor the difference between fixed-rate issues and their own floating issue, and Table 2 compares the Ohio variable-rate approach to fixed-rate securities. During the first year, Ohio saved more than \$3 million by issuing variable-rate se-

curities. Ohio's lower interest costs result from two important distinctions which characterize floating-rate securities.

• *Short-term rate*

The Ohio bonds bear a lower rate because the interest rate is fixed for a very short period of time. Since the rate changes weekly, they do not offer the protection that their interest rate will remain at the level set on the date of issue. For fixed-rate bonds, the interest rate remains unchanged for up to 20 to 30 years, no matter what happens to prevailing market rates. This protection warrants a premium, and government agencies must pay more to lock in a fixed rate.

Homeowners who compare fixed-rate mortgages to variable-rate borrowing will note that a 30-year, fixed-rate mortgage usually begins with much higher monthly payments. With variable-rate mortgages, the savings in house payments can be substantial, and the same rule applies to jail and prison financing. If a governmental agency is willing to give up some safety, interest payments can be much lower.

• *Liquidity*

The Ohio bonds offer a high degree of liquidity, because investors may quickly obtain the full cash value for their securities. Somewhat like a bank's passbook savings account, the Ohio securities may be cashed in almost immediately.⁹

In a bank, highly liquid accounts bear a lower interest rate than long-term accounts like Certificates of Deposit. The same holds true for Ohio's variable-rate bonds, since they may be redeemed or "put" back to the Building Authority with only 1 week's notice.

Termed the "demand" feature, this permits Ohio to pay a much lower interest rate than would be required for conventional bonds. Moreover, the lower rate was not an obstacle to raising capital. In fact, the entire \$79 million Ohio issue was sold during its first day in the market.

Risks—The short-term variable-rate feature that results in reduced interest rates for the Ohio approach also creates a degree of risk that does not accompany conventional methods.

• *Market Conditions*

Interest rates will vary and may not remain at the level in effect at the time of issuance. There is a significant risk that the variable rate may move up to a level higher than the fixed rate available at the time of issue. Looking back, governmental officials might deeply regret their decision to follow a floating rate when it would have been easy to lock in a fixed rate for 30 years. If rates increased, it would not be long before savings initially realized by variable-rate securities would be offset by higher interest payments.

• *Demand feature*

Although low interest rates are possible because investors maintain the prerogative to "demand" their money, this procedure represents a significant risk to a unit of government issuing variable-rate securities. Someone must guarantee the cash to investors, since the government agency has already spent the money on building the new correctional institution.

Should investors exercise the demand feature, the funds to return their principal must be borrowed from a

financial institution until the securities can be resold. An underwriter is retained to remarket securities that are "put back" by investors, and the risk of this procedure is that market conditions might make it difficult or impossible to sell the securities in a timely fashion.

Security

In order to receive a favorable rating for demand bonds, an issuing unit of government must guarantee a source of funds to pay investors in the unlikely event that bonds cannot be immediately resold. This procedure is known as a "letter of credit," and represents the guarantee by a financial institution that funds will be provided to cover the "put" by purchasers who have cashed in their bonds. This liquidity support is an essential feature of demand securities.

When these events transpire, every effort is made to remarket the securities as quickly as possible. Since the government agency must pay interest on the funds drawn against the letter of credit, the securities must be sold to new investors right away.

Table 2

**Interest cost savings with Ohio approach
\$79 million variable rate bonds—comparison to fixed-rate securities**

Month	Fixed Rate		Variable Rate		Savings*	
	Rate	Interest	Rate Range	Interest Paid	Per Month	Since Issue
April 1985	9.63%	\$633,975	5.15-5.20	\$302,473	\$331,502	\$ 331,502
May 1985	9.63%	\$633,975	5.30-5.40	\$359,395	\$274,579	\$ 606,082
June 1985	9.63%	\$633,975	4.60-5.30	\$324,441	\$309,534	\$ 915,615
July 1985	9.63%	\$633,975	4.50-4.80	\$305,286	\$328,689	\$1,244,304
Aug. 1985	9.63%	\$633,975	4.80-5.50	\$351,604	\$282,371	\$1,526,675
Sept. 1985	9.63%	\$633,975	5.45-5.50	\$354,959	\$279,016	\$1,805,691
Oct. 1985	9.63%	\$633,975	4.90-5.45	\$347,384	\$286,591	\$2,092,583
Nov. 1985	9.63%	\$633,975	4.90-5.50	\$324,874	\$309,101	\$2,401,384
Dec. 1985	9.63%	\$633,975	5.50-8.40	\$477,355	\$156,620	\$2,558,004
Jan. 1986	9.63%	\$633,975	6.25-9.00	\$483,740	\$150,235	\$2,708,239
Feb. 1986	9.63%	\$633,975	5.25-6.25	\$351,821	\$282,154	\$2,990,393
Mar. 1986	9.63%	\$633,975	4.60-5.25	\$314,501	\$319,474	\$3,309,867

Note:

Savings shown here are gross differences, not reflecting costs associated with variable-rate lease bonds. Charges to Ohio for a letter of credit and remarketing of securities, now estimated at approximately \$400,000 annually, reduce the net savings somewhat.¹⁰

* all figures rounded to nearest dollar.

This guarantee also provides credit support for an unforeseen disruption in lease payments. Should the governmental entity face difficulty, investors are assured that a financial institution will cover payments.

Banks and insurance companies provide this service to government agencies, a feature which costs anywhere from 1/8 of a percentage point up to 1 full percent per year. Ohio pays .45 percent to maintain this credit guarantee. When funds are actually drawn against the letter of credit, the unit of government pays interest as though it were a bank loan.

Both the letter of credit and remarketing fees represent additional costs associated with the demand feature of variable-rate securities. These costs have the effect of reducing the savings available from variable-rate securities.

Precautions

The Ohio Building Authority has taken steps to reduce risks associated with rising interest rates. Officials are confident that they have retained sufficient flexibility for an appropriate response to adverse economic conditions.

For example, officials may change the schedule for adjusting interest rates, anywhere from weekly to semiannually or any other period specified by the Building Authority. This mechanism works as a safeguard during periods of interest rate volatility.

The primary protection against dramatic increases in interest rates is a feature called "conversion." This permits Ohio to change from variable rates to fixed interest rates at any time. Should interest rates suddenly soar upward, the Building Authority could

lock in the most favorable fixed rate available.

Because of the conversion feature, some agencies have issued variable-rate securities in anticipation of a drop in rates. When a lower interest rate becomes available, an agency may exercise the conversion feature to lock in a reduced rate for 30 years. Ohio considered conversion to a fixed rate during July 1986, but officials decided to retain the flexibility of the variable rate.

As a final measure of safety, Ohio has provided that the entire issue may be redeemed or repurchased by the State in the event that the Building Authority wished to arrange for a new financing package.

Advantages of lease-purchase

Jurisdictions unable to proceed with traditional financing may consider the lease-purchase method for a variety of reasons:

- **Variable rates:** Since variable rates are usually not available for general obligation bonds, governmental entities may take advantage of lower interest payments for variable-rate lease issues, provided they are willing to assume the risks associated with a floating rate.

- **Avoid debt limit:** Leases do not create an ongoing obligation for the governmental entity. Leases are not a public debt because they generally include a "nonappropriation" clause permitting the lease to be terminated at the end of any year.

- **No voter approval:** Unlike general obligation bonds, lease bonds rely on general revenues and do not pledge

new taxes. Since the issue is only a lease, voter approval is almost never required.

- **Flexibility:** Conditions imposed upon the issuer of general obligation bonds may not apply to certain leases. Several States permit agencies to negotiate terms of lease financing when issued as certificates of participation, while general obligation bonds must be publicly bid. Another example is that date of issue and pricing may be shifted during volatile market periods.

- **Set-up time:** Lease financing may be arranged in as little as 45 days, provided that legal or organization changes, or both, are not required. Conventional methods consume more time for satisfaction of legal and procedural requirements. This benefit represents a significant advantage since an earlier bidding process may save the costs of inflation and may secure a lower interest rate.

- **Pooled financing:** Lease packages make it possible for a number of jurisdictions to form an agreement with a single financing entity, thus simplifying the process and reducing costs. The States of Ohio and Kentucky have used pooled financing to sell lease securities for a number of county jail projects.

Disadvantages of lease-purchase

Despite several positive features, alternative finance techniques also have significant disadvantages, representing important policy questions for a governmental agency.

- **No new tax revenues:** Since lease-purchase does not result in new ad valorem taxes, the unit of State or local government must find another way to make payments. This may require a direct outlay from the annual operating budget, allocation of a new tax, or development of a new revenue source.

- **Higher interest for fixed-rate issues:** Since the investment community does not consider a lease obligation to be as secure as general obligation bonds, lease issues earn a higher rate of interest, and costs to a governmental entity are higher.

Table 3
Comparison of interest costs¹¹

Conventional finance rate	New method fixed rate	New method variable rate
General obligation bond	Lease-purchase bond	Lease-purchase demand bonds
9.63%	10.09%	5.15%

Table 4
Construction finance alternatives: Typical examples

Traditional approach (General obligation bonds)		
Fixed rate, 20- to 30-year maturity	Decline in use	<ul style="list-style-type: none"> • Provides tax-exempt interest to investors • Most secure investment—highest rating • Voter approval often required; new property taxes source of payments • Adds to public debt • Least costly fixed-rate security
New techniques (Tax-exempt lease-purchase bonds)		
Fixed-rate securities	Most frequent alternative	<ul style="list-style-type: none"> • Bypasses many requirements and problems • Source of lease payments must be identified • Role of government agency unchanged • Raises capital quickly • More costly for issuer if rate is fixed
Variable-rate securities	Innovative technique	<ul style="list-style-type: none"> • Same benefits as fixed-rate lease-purchase • Risks of rising interest rates and remarketing • Usually convertible to fixed rate • Issued in Ohio, California, and Pennsylvania • Usually lowest interest rate at time of issue
Privatization (Taxable private financing)		
Private ownership	Limited experience	<ul style="list-style-type: none"> • Owned by profitmaking company • Higher interest rate than public financing • Owners may receive special tax advantages • Tax-exempt income not available to owners • Financing and operation are separate issues

• **Risks for variable-rate issues:**

Although less expensive than conventional financing, floating rate issues are also somewhat risky. Like any homeowner with an adjustable-rate mortgage, a State or county assumes the risk of rising interest rates. If interest rates increase rapidly, a unit of government may ultimately have to pay a higher rate than would be required if a fixed-rate issue had been selected.

• **Adverse public opinion:**

Since lease-purchase issues may bypass a ballot measure, taxpayers may view leases as an effort to evade the will of the electorate. In this way, the decision to proceed with lease-purchase could become a political issue, particularly if a previous referendum has failed.

Table 4 summarizes each of the four financing methods described in this *Construction Bulletin*. Ohio's approach is depicted as the most advanced method since it incorporates both lease-purchase and variable rates. Privatization is also shown to illustrate how the private sector may become involved in financing.

Conclusions

Evaluation of financing options has become a complex undertaking. Mistakes can be costly. Officials should exercise caution when considering alternative finance methods. A variety of strategies for borrowing may be considered by officials planning to build correctional institutions, and positive or negative consequences of their financing decisions may endure for as many decades as the institution itself.

As demonstrated by Ohio, lease-purchase bonds come in several forms, and variable-rate issues can be quite complicated. While a fixed-interest lease requires the issuer to pay investors up to 1 percentage point *more* than general obligation bonds, a floating-rate lease costs *less* than the traditional method. As shown in Table 3, these savings can be substantial. If officials are willing to assume risks associated with rate increases and remarketing, variable-rate securities may cost 4 to 5 percent less than rates for general obligation bonds.

Although Ohio's variable-rate approach is responsive to needs and priorities in that State, this method may not be the answer for everyone. Because financing alternatives now available to State and local officials are numerous and diverse, general conclusions are usually inappropriate. Each city, county, and State should consider the unique factors that bear upon ability to raise capital and repay debt.

Lease-purchase financing is a viable alternative for agencies that are blocked from use of conventional methods. However, lease bonds are likely to cost a governmental entity more money, in the form of higher interest payments.

Fixed-rate lease financing is being employed in many States, including Alaska, Arizona, California, Colorado, Florida, Georgia, Indiana, Kentucky, Louisiana, Massachusetts, Missouri, New Jersey, New York, Oregon, Rhode Island, Texas, Virginia, and Washington.

Variable-rate securities can cost less than both fixed-rate lease bonds and general obligation bonds, but this approach presents certain risks that must be carefully considered.

The Ohio plan has been expanded to include local jails. On February 15, 1986, another issue of \$25 million was sold to finance construction of county jails throughout the State. Like the lease issue for prison construction, these securities were also variable-rate demand bonds. Another \$150 million prison issue is being sold during the summer of 1986.

Like Ohio, other jurisdictions have tested variable-rate financing of correctional facilities. The City of Philadelphia previously financed a jail with floating-rate securities. In California, both Los Angeles and Sacramento counties have issued similar securities for criminal justice facilities.

To help make these decisions, many jurisdictions have engaged the services of a professional financial adviser. Independent consultants and accounting firms may be retained to analyze the alternatives and prepare recommendations for review by the government agency. Investment bankers also

provide these services as part of their underwriters contract to arrange for financing.

Only rigorous quantitative analysis can determine which approach works best for each agency. Like Ohio, many State and local agencies are weighing the risks of variable-rate lease securities against the substantial savings that may be realized from this approach, and this creative new technique has captured the attention of officials across the Nation.

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Illustrations courtesy of the Voinovich Companies.

Privatization

The lease examples explained in this *Construction Bulletin* do not change the role of governmental agencies. Another form of leasing—"privatization"—relies entirely upon the private sector and represents a major shift in policy.

With lease-purchase, government officials have created a nonprofit entity that acts on behalf of their agency. With "privatization," a profitmaking company actually owns the institution because private investors have put up the money to build the facility.

Financing provided by a private company is almost always more costly because a unit of government can obtain a lower interest rate than a private company. A major reason for the higher cost is that lease payments on a privately owned institution must be treated as taxable income. In the recent past, the higher cost of private financing has been somewhat reduced because special tax benefits may be available to a company raising capital for construction. When tax benefits are available, private owners of a facility may pass their savings through to the governmental entity in the form of reduced lease payments.

Private owners of correctional facilities have been eligible to claim such tax benefits as depreciation and investment tax credits. However, Federal legislation pending in the summer of 1986 would disallow most of the tax advantages of private ownership. Accordingly, the cost of private financing will probably be even higher than in the past.

"Privatization" may also involve private-sector management and operation of a correctional facility, although this issue is not related to the type of financing. While private firms may offer contracts for both operations and financing, these issues should be examined separately. Although costs of operation may be discretionary, costs of private financing are necessarily higher when raising capital for construction.

Other features of private-sector participation may be of interest to State and local officials. Many firms now offer a comprehensive package of services called "turnkey" or "design-build" contracts in which a single company provides a variety of services ordinarily divided among several different firms. Depending upon the laws of each jurisdiction, consolidation into one contract may be an efficient approach that results in faster completion of the correctional facility.

Industrial development bonds, or "IDB" financing, represent a public-private partnership. This approach offers tax-exempt income to investors because securities are issued with the authorization of a governmental entity. However, total financing must be limited to \$10 million, and the unit of government must pay full, fair market value for the facility upon termination of the lease. Use of industrial development bonds is tightly restricted by Federal law, and it is expected that Congress will impose further limitations on this approach in the future.

Some of the most commonly asked questions are:

If a jurisdiction cannot raise funds to build a correctional institution because of obstacles to conventional financing, can lease-purchase be of help?

Yes. Lease-purchase may serve as an appropriate alternative to traditional financing when conventional alternatives have been exhausted. Legal distinctions make lease financing possible where conventional methods may be precluded. However, the lease-purchase approach may not be as safe or economical. Variable-rate issues are somewhat risky and fixed-rate leases are more expensive than general obligation bonds.

If a jurisdiction does not have funds to make payments on general obligation bonds, will lease-purchase methods solve the problem?

No. Like conventional methods, the lease-purchase approach also requires regular payments. A stream of revenue must be identified to cover lease payments. Many jurisdictions have created new sources of revenue. Examples may be found where sales taxes, filing fees, and fines are used to satisfy the required payments. Ohio has pledged sales revenues from penal industries.

Variable-rate lease issues are less expensive than conventional methods, and may be of assistance to jurisdictions with a limited ability to make payments. However, the extent of savings depends upon many factors, including changes in interest rates, and whether funds must be drawn against the letter of credit.

Since the variable-rate securities have a "put" feature, does this mean the government agency must return the money to investors if they exercise the demand feature?

Yes. However, a government agency would prepare for this possibility by securing a letter of credit (LOC) and having a remarketing agent to immediately sell the securities to new purchasers. The LOC represents a loan, so that funds may be borrowed to pay investors if the bonds are not resold.

When State and local government officials issue a variable-rate lease bond, are they protected from increases in the interest rate?

No, not completely. Underwriters have developed a number of features to afford a high level of protection, but the risks are not entirely eliminated. Safeguards come in the form of conversion features—allowing an agency to switch from a variable rate to a fixed rate, change the schedule for adjustments in interest rates, and buy back the entire issue for refinancing.

If the prime rate were to increase at a pace that caused concern, the conversion feature might be exercised to provide the protection of a fixed rate. However, the fixed rate available at that time would be higher than the fixed rate available at the time securities were issued. How much higher these rates might be at conversion depends on how quickly the prime rate advances and when the decision for conversion is made.

Do lease-purchase methods represent "privatization" of corrections?

No. These finance methods do not involve the private sector in any position of management or control over corrections agencies. The role of the sheriff or corrections director remains unchanged when the finance techniques shown in this *Bulletin* are used to build a correctional facility.

An entity like the Ohio Building Authority is not a private firm, and ownership of correctional institutions never passes to a profitmaking company. Independent, nonprofit governmental-corporate agencies such as the Building Authority were in widespread use all across the Nation long before the current debate over private-sector management of correctional institutions.

A true example of "privatization" is one where a private company assumes responsibilities formerly discharged by a government agency, and such arrangements do not necessarily have anything to do with how to finance construction of a new jail or prison.

A few examples may be found where units of government have built correctional institutions with advanced finance methods and also decided to contract with private companies to operate the facilities. Although very limited in number, these true examples of "privatization" have contributed to a mistaken understanding that all applications of new finance methods result in private-sector ownership and/or management of correctional facilities.

Notes

1. Camp, George and Camille, *Corrections Yearbook, 1986*. Published by Criminal Justice Institute, South Salem, New York.

2. Assumes construction cost of \$10 million is financed at \$11.3 million issue. Interest payments at 8 percent are \$1,150,929 annually for 20 years. The total payments for 20 years would be \$23,018,580. Assumes no arbitrage, and debt service reserve fund makes final payment.

3. *The Bond Buyer*, 1 State Street Place, New York, NY 10004. Founded in 1891.

4. Legislation pending in July 1986, not in its final form at the time of publication.

5. Assumes construction cost of \$10 million is financed as \$11.3 million issue. Interest payments at 8 percent are \$1,150,929 annually for 20 years. With 5 percent annual inflation, cost increases at \$500,000 annually or \$41,667 each month.

6. Interest rate of 9 percent on \$11.3 million issue would be \$1,237,875 versus \$1,150,929, representing an additional cost of \$86,946 annually, or \$1,738,920 for 20 years. The total principal and interest payments at 9 percent would be \$24,757,500.

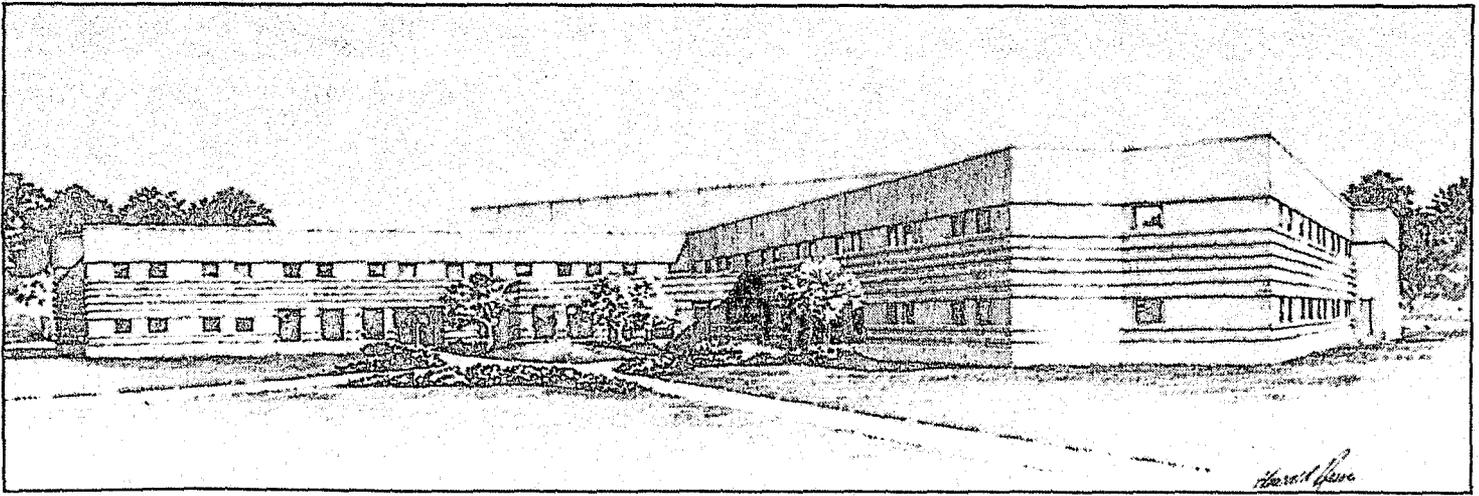
7. Data taken from official statement prepared by McDonald and Company Securities, Inc., Cleveland, Ohio. Current information from Ohio Building Authority.

8. Rate at issue in April 1985 was 5.15 percent. Ohio Building Authority reports a low of 4.5 percent and a high of 9.0 percent during the first year from issuance.

9. Current procedures require 1 week notice for exercising "put" option/demand feature.

10. Data provided by Ohio Building Authority.

11. Shown is Ohio's actual variable rate compared to the G.O. rate and revenue bond rate on April 4, 1985, the date of issue. From *The Bond Buyer* (see note 3). Each example is 20-year term. Interest rates in effect in Ohio for representative securities shown, data provided by McDonald and Company.



One of Ohio's new prisons, the Ross Correctional Institution.

Further information about lease-purchase financing...

Do you want to evaluate how the information presented here about Ohio may be applicable in your jurisdiction? Another National Institute of Justice publication, soon to be available, provides more details on lease-purchase financing in clear, understandable terms. The publication leads you through simplified examples of financing facility construction, complete

with all the necessary cost calculations, and shows you how and when lease-purchase financing will be more expensive or approximately the same cost as traditional general obligation bond financing.

To order your copy, call 800-851-3420 or write to the National Criminal Justice Reference Service, Box 6000, Rockville, MD 20850, and request *Lease-Purchase Financing for Prison and Jail Construction*.

Please note:

Readers are cautioned that generalizations may not apply to every jurisdiction across the Nation. State and local laws will vary, resulting in somewhat different applications. The concepts published in this case study do not necessarily reflect the official policy or recommendations of the National Institute of Justice nor is any endorsement of particular firms or products implied. Points of view or opinions stated in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

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