



**REGIONAL AIRPORT  
AUTHORITY**  
LOUISVILLE AND  
JEFFERSON COUNTY®

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Regional Airport Authority of  
Louisville and Jefferson County  
2002 Annual Report

## EXECUTIVE STATEMENT

The tragic events of September 11, 2001 brought grief and tremendous change to this country. Over the past year, those who travel and those who run airports and airlines have profoundly felt the impact of those changes. Security, economic viability and public faith in air travel remain challenges, but we, the Regional Airport Authority, are committed to doing our part to address these and other issues.

We were pleased that Louisville International Airport was chosen by the federal government to participate in a benchmark security study, which placed the airport on the national forefront for security enhancements. Louisville International was among the first airports to receive Electronic Trace Detection devices (ETDs) for baggage screening; a bomb detection canine unit; and federalized baggage and passenger screeners, to name a few of the enhancements.

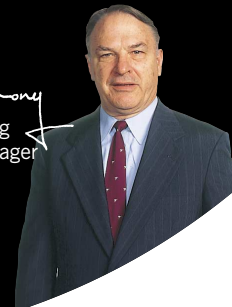
An even more aggressive initiative to bring further safety, security and efficiency enhancements to Louisville International Airport was led by Kentucky's Congressional delegation and the Authority's Board of Directors. That initiative resulted in Louisville International Airport being chosen as the national model site for the testing and integration of the next generation of aviation technology. This technology, covering a range of concerns from ground tracking to wind vortices, will help define the future of flight--and bring a new dimension of safety, security and efficiency to air travel.

The Authority extends its sincere thanks to the traveling public for their patience and understanding over the past months. We will continue to work with our travelers, airlines, federal officials and the Greater Louisville community to ensure safe, secure and convenient air travel.



J. Michael Brown  
Chairman

Jim DeLong  
General Manager





FY 2002 •  
BOARD MEMBERS



David Armstrong,  
Mayor of Louisville



Rebecca Jackson,  
County Judge Executive  
of Jefferson County



Dorn Crawford



Bruce Traugher



Ray McDonald

J.D. Nichols  
Vice Chairman

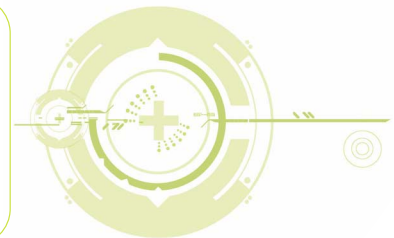
Larry Hayes  
Secretary/Treasurer

Cissy Musselman



Milo D. Bryant

Sam Rechter



*This annual report focuses on the many new technologies being tested and modeled at Louisville International Airport, for which the groundwork was laid in FY 2002. But, laying the groundwork for new technology was not the only project this year. There were other successes at Louisville International, Bowman Field and the Regional Airport Authority occurring simultaneously.*

## **TERMINAL IMPROVEMENTS**

Last summer, Louisville air travelers saw the opening of the Woodford Reserve Bar and Grill and Louisville Concierge in the terminal. Travelers now have the convenience of a personal courier, florist, dry cleaner, event planner and many other services on airport.

## **EXTERNAL TERMINAL IMPROVEMENTS**

Louisville International gained two new major tenants: the U.S. Customs Service, which relocated from downtown to a stand-alone facility, and Aviation Technology, Inc. (ATI), which added a shop at the general aviation terminal. ATI is an FAA-certified aircraft maintenance and repair shop. Additionally, a new airport fire station was constructed to provide faster response times and enhanced airfield access.

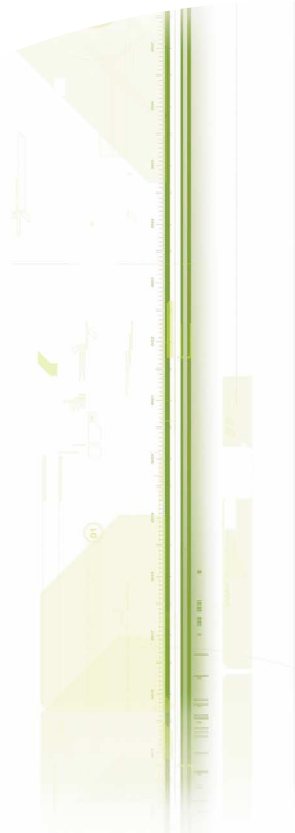
## **PASSENGER SERVICE**

Although still rebounding from the slowed economy, Louisville International Airport handled over 3,521,170 total passengers in FY 2002. Airline service remained strong with 105 daily non-stop and direct flights to 44 destinations in 25 states plus Canada, Mexico and the District of Columbia. There were 176,872 flight operations at Louisville International Airport in FY 2002.

## **BOWMAN FIELD**

Governor Paul Patton rededicated the nation's oldest continually operating airport, Bowman Field, noting "Bowman Field is critical to the state's aviation infrastructure, both as a reliever airport for Louisville International and as a general aviation training center." There were 114,341 flight operations at Bowman Field in FY 2002.

Bowman also added 27 new T-Hangars, bringing the total to 223.



## AIRPORT MASTER PLAN

The Authority's Board of Directors unanimously approved a new Master Plan for Louisville International Airport – a \$714 million plan to double the size of Louisville International's terminal by 2020 – and to make significant airside and landside enhancements as dictated by increased airport activity. *(For more information, go to [www.airportmasterplan.com](http://www.airportmasterplan.com))*

## RELOCATION/NOISE STUDY

Since its inception, the airport's voluntary relocation program has reduced the number of families impacted by aircraft noise in approved areas from 2,179 to 666, for a reduction of 69% in FY 2002. The year ended with the voluntary relocation program on pace in making home-purchase offers to families wanting to relocate from the most noise affected areas.

Following several public sessions to gather community input, a citizen's committee began finalizing recommendations to update Louisville International's Part 150 Noise Compatibility program. The changes seek to minimize the impact of aircraft noise by realigning flight patterns and preferred runway usage, which expose the fewest number of residents to the least amount of aircraft noise. *(For more information, go to [www.sdfnoisestudy.com](http://www.sdfnoisestudy.com).)* The Authority also launched the AirportMonitor™ Internet flight-tracking system, to provide near real-time flight information for airport neighbors. *(To view, go to [www.louintlairport.com](http://www.louintlairport.com) and click on 'Noise Compatibility,' then click on 'View AirportMonitor.')*

## UPS/CARGO

Louisville's cargo/freight/mail volume – shipped predominantly by United Parcel Service – was 3.2 billion pounds as of June 30, 2002. Also, the Authority awarded Aviation Facilities Company (AFCO) a contract to renovate the airport's existing cargo facility and develop a new facility at Louisville International. AFCO is a leading developer of cargo facilities in the U.S.



**A National Model for Aviation Technology.** In a new approach to aviation technology testing, the FAA will test multiple “next generation” technologies at a single airport – Louisville International – rather than scattering these resources across the country. In this way, the new systems’ primary functions are tested, along with their ability to integrate with other technologies. This fast tracks the FAA’s ability to bring new technology to the nation’s airports.

Why Louisville? Louisville was chosen due to its strong UPS/cargo market, the diversity of scheduled airlines and aircraft types, an active military presence, supportive labor/management relations, and a professional airport staff.

How does the airport benefit? Louisville International will be among the first airports in the U.S. to have the newest and most advanced aviation technology, that is designed to address a number of safety, security and efficiency concerns. On the following pages are a few of the new technologies being tested in Louisville followed by a brief explanation of what they are and the benefit they offer Louisville and, subsequently, the nation’s airports.



## COMMON ARTS IIIE

**WHAT IT IS:** A system that combines data, graphics and images from multiple existing and new technologies onto a single, high-resolution color display.

**BENEFIT:** Provides Air Traffic Controllers the potential to have immediate access to data on weather, wake turbulence, location of vehicles and other heat emitting sources – such as people and animals – on a single screen or monitor, thereby enhancing safety, security and airfield capacity.

Currently, air traffic controllers must monitor a separate screen for each of these new technologies: Infra-Red Tracking Systems; Multi-Lateration; Automatic Dependant Surveillance – Broadcasts; Aircraft Vortices Avoidance Systems; and Advanced Flight Management systems for Required Navigation Performance approaches and do so simultaneously while monitoring conventional screens for managing air traffic. Common ARTS IIIE merges all these separate screens onto a single screen to provide air traffic controllers with more and better information with fewer distractions when directing aircraft and ground vehicles.



## **AUTOMATIC DEPENDANT SURVEILLANCE - BROADCAST (ADS-B)**

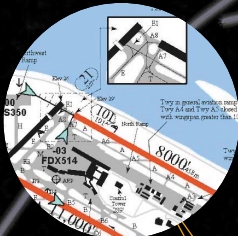
**WHAT IT IS:** A new type of surveillance which, in conjunction with an advanced navigation system such as Global Positioning System (GPS) or Flight Management System (FMS), determines the location of an aircraft or ground vehicle and broadcasts it to other aircraft and ground vehicles, the FAA and Air Traffic Controllers.

**BENEFIT:** ADS-B permits controllers, pilots, vehicle drivers and others with ADS-B displays to “see” aircraft and ground vehicles themselves, even in periods of low visibility, thereby minimizing the risk of mid-air collisions, ground collisions and runway incursions. Also assists FAA by reducing their reliance on costly ground-based radar equipment. Common ARTS IIIE displays this data on the same screen as other data for controllers’ ease of use.

## **MOVING MAP DISPLAY**

**WHAT IT IS:** An in-cockpit or in-vehicle display that shows the pilot or vehicle operator the exact position of the aircraft or vehicle they are operating, as well as that of other similarly equipped aircraft and ground vehicles.

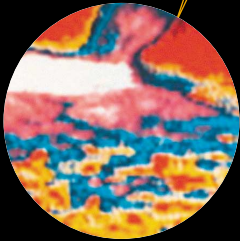
**BENEFIT:** Provides civilian and military pilots the ability to detect, without having to rely on air traffic controllers and line of sight, the location of airborne and landed aircraft and ground vehicles, thereby minimizing the possibility of mid-air collisions and runway incursions. Aids ground rescue, maintenance and other emergency vehicles during low visibility, thus reducing response times.



## INFRA-RED TRACKING SYSTEM

**WHAT IT IS:** Multiple heat-sensing airfield cameras that transmit an infra-red image onto a screen showing each animal, person or heat-emitting vehicle and its movements, many of which would not be "seen" using conventional surveillance equipment.

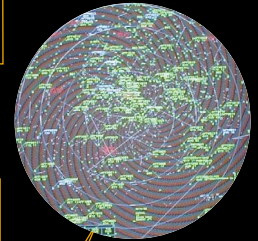
**BENEFIT:** Provides air traffic controllers and aviation security personnel information on the location of all animals, people, and heat-emitting equipment on the airfield. This equipment will minimize the possibility of ground collisions and security breaches. At present, it is nearly impossible for air traffic controllers, much less pilots and other airfield workers, to see all aircraft, vehicles – and occasionally people and animals – moving on most airports, particularly during periods of low visibility, thereby creating potential safety and security hazards and compromising operating efficiency. Common ARTS IIIE displays this data on the same screen as other data for the controllers' ease of use.



## MULTI-LATERATION

**WHAT IT IS:** A series of ground-based receivers that use "triangulation" to locate and identify where all appropriately equipped aircraft and vehicles are located on the airfield, including areas where conventional radar could not "view" due to spotty coverage caused by buildings, service gaps and so forth.

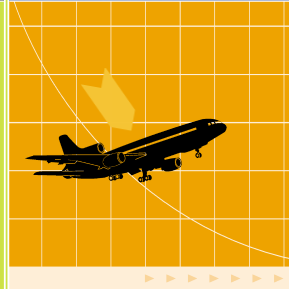
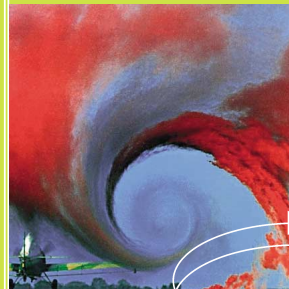
**BENEFIT:** Permits air traffic controllers to "see" all aircraft and ground vehicles on the airfield on a single screen, including airfield areas formerly unable to be "seen" on radar, to ensure adequate separation between aircraft and ground vehicles, thereby minimizing collisions and runway incursions. Also permits airlines and airport tenants to know where on the airfield their vehicles are at all times, which enhances fleet management and operating efficiency. Improves airfield security by alerting appropriate parties if vehicles stray outside their authorized areas. Common ARTS IIIE displays this data on the same screen as other data for the controllers' ease of use.



RNP •



• AVAS



• De-Acceleration Approach



### **REQUIRED NAVIGATION PERFORMANCE (RNP)**

**WHAT IT IS:** An FAA-approved instrument approach using more sophisticated on-board computers and an advanced Flight Management System (FMS) for more precise positioning and navigation of aircraft.

**BENEFIT:** Permits commercial aircraft with this equipment to more precisely fly noise abatement paths, thereby minimizing the number of people affected by aircraft noise. Improves positioning and navigation capabilities, thereby allowing aircraft to land at airports under lower visibility than is allowed today with conventional navigational aids. Increases airport capacity and efficiency by freeing aircraft from flying a zig-zag course dictated by ground-based navigational aids. Simplifies pilot training by allowing pilots to practice just one type of instrument approach, instead of the multiple instrument approaches in use today.

### **AIRCRAFT VORTICES AVOIDANCE SYSTEM (AVAS)**

**WHAT IT IS:** Predicts the location and intensity of aircraft-generated air turbulence with sufficient precision to enable pilots to avoid the turbulence and to safely narrow the separation between arriving and departing aircraft.

**BENEFIT:** Avoiding air turbulence permits pilots to deliver passengers to their destination more quickly, more safely and more comfortably. AVAS also permits pilots to arrive at airports with less separation between aircraft and on multiple corridors, thereby enhancing capacity and reducing congestion. And, AVAS permits runways to be placed closer to each other, which also enhances capacity, reduces congestion, and may minimize the impact of aircraft noise – all without jeopardizing safety. Common ARTS IIIE displays this data on the same screen as other data for controllers' ease of use.

### **DECELERATION APPROACH**

**WHAT IT IS:** A set of aircraft approach procedures using sophisticated navigational equipment that dictates where aircraft fly both horizontally and vertically while reducing engine thrust levels.

**BENEFIT:** Minimizes aircraft noise over populated areas by permitting aircraft to fly higher for longer periods of time on final approach at lower power settings. This provides an efficient alternative to sound insulation and voluntary relocation and may significantly reduce the number of homes requiring such noise mitigation measures. Reduces fuel consumption by flying aircraft at higher altitudes for longer periods, whereby less fuel is consumed.

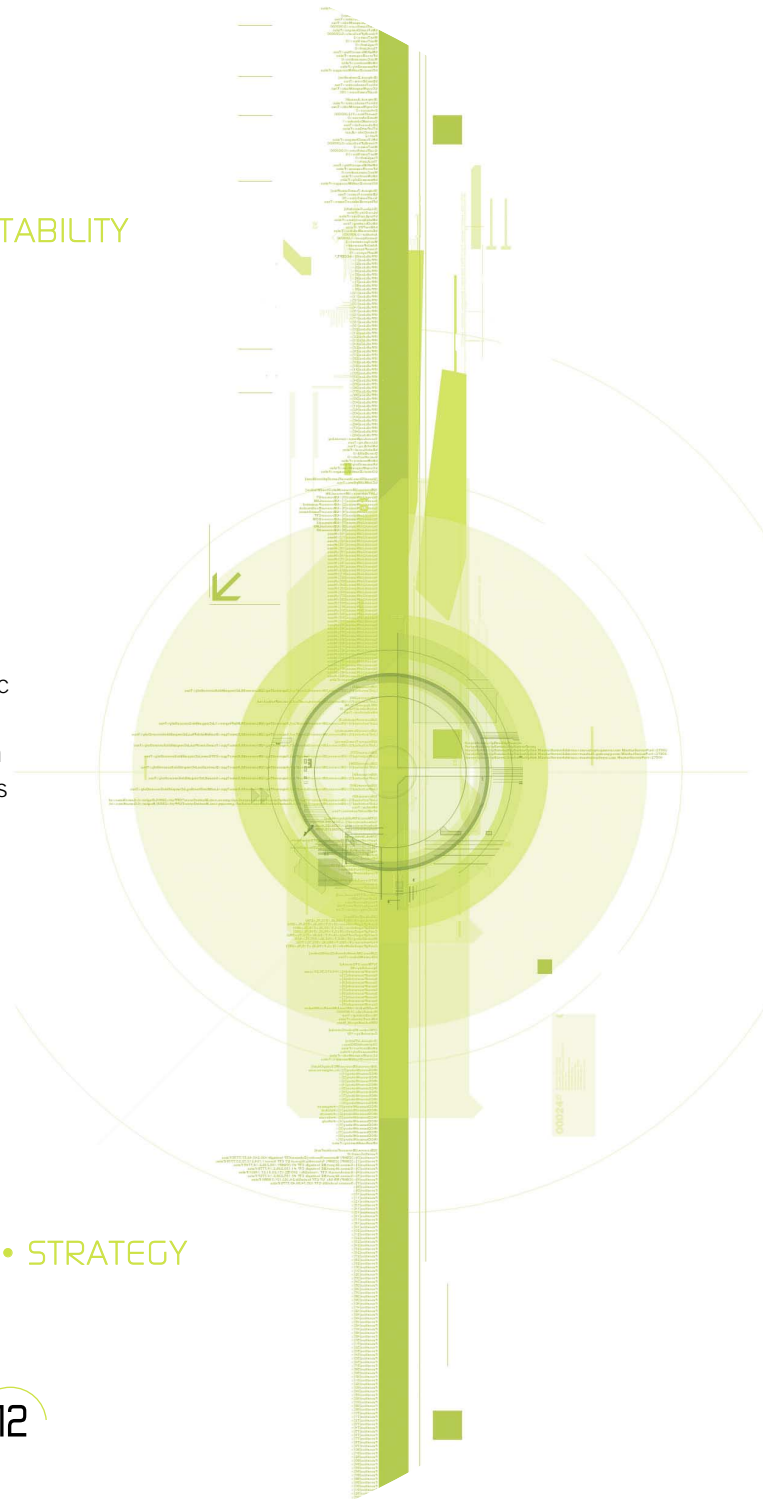
• STABILITY

### IMPROVED S & P CREDIT RATING

In March 2002, the Authority's conservative and strategic business practices paid dividends as Louisville International Airport became one of the first airports in the country to be removed from the Standard & Poor's CreditWatch List after September 11, 2001. S&P then affirmed an exceptional A+ rating for the airport.

STRENGTH •

• STRATEGY





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<b>LIABILITIES</b>	<b>2002</b>	<b>2001</b>
Current liabilities (payable from unrestricted current assets)		
Accounts payable	\$ 670,526	\$ 2,064,197
Accrued expenses and other	686,784	637,719
Deferred income	<u>1,478,186</u>	<u>658,452</u>
Total current liabilities (unrestricted)	<u>2,835,496</u>	<u>3,360,368</u>
Current liabilities (payable from restricted assets)		
Current portion of bonds payable	17,595,000	16,750,000
Bond anticipation notes	0	10,000,000
Accounts payable	3,792,967	5,683,760
Accrued interest	1,854,050	1,655,400
Revolving coverage	<u>6,300,000</u>	<u>6,300,000</u>
Total current liabilities (restricted)	<u>109,542,017</u>	<u>40,389,160</u>
Total current liabilities	<u>112,377,513</u>	<u>43,749,528</u>
Long-term debt		
Bonds payable	344,850,000	362,445,000
Bond anticipation notes	<u>80,000,000</u>	<u>80,000,000</u>
Total long-term debt	<u>344,850,000</u>	<u>442,445,000</u>
Other liabilities		
Deposit from Kentucky Air National Guard	297,834	206,615
Unamortized bond premium, net	2,728,646	2,839,064
Deposit from Commonwealth of Kentucky	20,000,000	20,000,000
Deferred income	<u>270,369</u>	<u>355,506</u>
Total other liabilities	<u>23,296,849</u>	<u>23,401,185</u>
Total liabilities	<u>480,524,362</u>	<u>509,595,713</u>

<b>NET ASSETS</b>	<b>2002</b>	<b>2001</b>
Invested in capital assets, net of related debt	\$284,153,436	\$252,937,957
Restricted for debt service	9,364,109	9,360,180
Restricted for capital projects	1,589,229	749,900
Unrestricted	<u>(7,065,417)</u>	<u>19,230,902</u>
Total net assets	<u>\$288,041,357</u>	<u>\$282,278,939</u>

<b>STATEMENTS OF REVENUES &amp; EXPENSES</b>	<b>2002</b>	<b>2001</b>
Operating revenues		
Rentals and concessions	\$30,368,435	\$30,170,177
Landing and field use fees	<u>22,522,742</u>	<u>23,767,029</u>
Total operating revenues	<u>52,891,177</u>	<u>53,937,206</u>
Operating expenses		
Operations and maintenance	8,942,928	9,023,798
Depreciation and amortization	26,687,340	26,109,725
Administrative, general, planning and engineering	<u>7,546,647</u>	<u>8,002,403</u>
Total operating expenses	<u>43,176,915</u>	<u>43,135,926</u>
Operating income	<u>9,714,262</u>	<u>10,801,280</u>
Nonoperating revenues (expenses)		
Investment earnings, net	6,562,838	4,030,371
Interest expense	(20,329,913)	(21,020,576)
Passenger facility charges	4,859,834	5,639,097
Net loss on a sale of assets and other revenue	<u>(374,170)</u>	<u>(14,769)</u>
Total nonoperating revenues (expense)	<u>(9,281,411)</u>	<u>(11,365,877)</u>
Income before capital contributions	432,851	(564,597)

**REVENUES & EXPENSES CONTINUED**

	<u>2002</u>	<u>2001</u>
Capital contributions	\$ <u>5,329,567</u>	<u>\$35,645,782</u>
Increase in net assets	5,762,418	35,081,185
Net assets, beginning of year	<u>282,278,939</u>	<u>247,197,754</u>
Net assets, end of year	<u>\$288,041,357</u>	<u>282,278,939</u>

**STATEMENTS OF CASH FLOWS**

	<u>2002</u>	<u>2001</u>
Cash flows from operating activities		
Receipts from customers and users	\$54,917,856	54,383,409
Payments to suppliers	(11,719,943)	(11,322,392)
Payments to employees	<u>(7,618,574)</u>	<u>(5,497,968)</u>
Net cash provided by operating activities	<u>35,579,339</u>	<u>37,563,049</u>
Cash flows from capital and related financing activities		
Capital contributions	5,582,655	35,619,088
Repayment of capital contributions	0	(3,462,887)
Passenger facility charges	4,859,834	5,639,097
Acquisition and construction of capital assets	(65,779,492)	(32,947,873)
Proceeds from issuance of capital debt	0	109,250,000
Principal paid on capital debt	(26,750,000)	(19,970,000)
Interest paid on capital debt	(20,131,263)	(20,970,445)
Issuance cost of capital debt	<u>(43,257)</u>	<u>(1,562,205)</u>
Cash flows from capital and related financing activities	<u>(102,261,523)</u>	<u>71,594,775</u>
Cash flows from investing activities		
Proceeds from maturities of investments	36,375,294	0
Purchase of investments	(5,000,000)	(81,022,028)
Investment income	<u>6,882,115</u>	<u>5,608,769</u>
Net cash provided by investing activities	<u>(38,257,409)</u>	<u>(75,413,259)</u>
Net increase (decrease) in cash and cash equivalents	(28,424,775)	33,744,565

Cash and cash equivalents, beginning of year	<u>61,724,812</u>	<u>27,980,247</u>
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Cash and cash equivalents, end of year	<u>\$33,300,037</u>	<u>61,724,812</u>
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Reconciliation of operating income to net cash provided by operating activities

Operating income	\$ 9,714,262	\$10,801,280
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	26,687,340	26,109,725
Changes in assets and liabilities:		
Fees and rentals receivable	(208,887)	(704,029)
Deferred income	734,597	(124,596)
Supplies and prepaid expenses	(3,367)	338,393
Accounts payable	(1,393,671)	1,081,351
Accrued expenses and other	<u>49,065</u>	<u>60,925</u>

Net cash provided by operating activities	<u>\$35,579,339</u>	<u>\$37,563,049</u>
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**Noncash capital and financing activities:**

The Authority has retainage and accounts payable related to construction in progress of approximately \$3,792,967 and \$5,683,760 as of June 30, 2002 and 2001, respectively. These noncash transactions have been excluded from the above statements.