[Front cover of budget book showing buses trains and rail stations]

[List of CTA board members]

Chicago Transit Board
Terry Peterson, Chairman
Appointed by: Mayor, City of Chicago

Arabel Alva Rosales, Vice Chair
Appointed by: Governor, State of Illinois

Kevin Irvine
Appointed by: Mayor, City of Chicago

Rev. Johnny Miller
Appointed by: Mayor, City of Chicago

Alejandro Silva
Appointed by: Mayor, City of Chicago

Andre Youngblood
Appointed by: Governor, State of Illinois

Chicago Transit Authority
Dorval R. Carter Jr, President

[Letter from the President]

Dear CTA customers:

For 70 years, the Chicago Transit Authority (CTA) has been part of the fabric of Chicago.

Since 1947, CTA buses and trains have connected communities across the city, bringing hundreds of millions of riders to their destinations. Whether to work, to school, to shopping, to places of worship, to parks, or to friends and family, the CTA has provided affordable, convenient, reliable transportation 24 hours a day, seven days a week.

But transit is about more than just getting from point A to point B. It's about fostering economic development and improving neighborhoods. It's about reducing congestion and improving air quality. It's about attracting employers and residents to Chicago, and connecting workers to jobs. It's about quality of life.

Under the leadership of Mayor Rahm Emanuel, the CTA has embarked on an unprecedented program of modernization. Since 2011, the Mayor and CTA have announced, begun or completed more than $8 billion in modernization efforts—from new or completely rehabbed buses and rail cars, to new and rebuilt rail stations, to new and expanded technologies. All of those investments were made with one goal in mind: the creation of a modern, efficient, 21st Century transit experience for customers.

For 2018, I am pleased to propose a balanced operating budget of $1.514 billion. This budget is $9.7 million below the 2017 budget. I am also proposing a five-year, $2.7 billion Capital Improvement Plan (CIP) for 2018-2022. While budgets often increase with inflation, the CTA was able to hold the line on costs and even reduce costs below the 2017 budget while continuing to make historic investments to the system.

Maintaining transit service in an ever-changing marketplace takes thoughtful planning, prudent management, and a focus on providing the highest possible level of service. It also takes a commitment to running the most efficient operation possible. Since 2011, the CTA has realized roughly $300 million, or 20% of our entire budget, in cost savings and new revenues. Those savings and new revenue have allowed the agency to not only maintain the current levels of bus and rail service, but also to continue to invest in new service, technologies and other ways to improve the customer experience. To put the savings amount into further perspective, those efforts avoided the equivalent of thirteen $0.25 fare increases (a total of $3.25).

In 2018, we face an unprecedented fiscal challenge. The State of Illinois budget that passed earlier this year included significant reductions in operating budget funding to support regional transit. CTA, which carries more than 80 percent of the region's transit rides, has shouldered the largest portion of the state cuts: more than $33 million in reduced funding. Those funding cuts—combined with slow economic growth, historically low gas prices, increased marketplace competition, and a number of other factors—have required CTA to explore several options to balance our budget. Additionally, the State has not passed a capital program since 2009, which typically provides over $200 million per year for capital projects.

CTA remains committed to be good stewards of the public dollar. Since 2011, we have looked internally to find about $300 million in cost savings, operational efficiencies and new, non-farebox revenues. Over $100 million of that has been achieved since I became CTA President in May 2015, including the elimination of 100 management positions and about $17 million in fuel and power savings, among other

reductions.

I have continued to identify a number of areas where we can cut costs and realize additional revenues in 2018:

- Cut $12.5 million in 2018 labor costs by eliminating 45 non-union positions and restricting hiring on an additional 70 positions
- Lock in fuel and power costs at historically low prices, which provide budget certainty at attractive prices. In 2018 the savings is estimated at $4.7 million
- Hold the line on contractual expenses
- Increase advertising and concession revenue by more than $3 million per year by renegotiating the contract to expand the number of advertising screens

Unfortunately, cost-cutting and new revenues alone are not enough to make up for the unprecedented cut in state funding we're facing. As a result, the CTA proposes an increase in the base fare for bus and rail rides to partially offset State budget reductions to CTA operations. The 25-cent increase would be the first change in the base fare since 2009. No other major U.S. transit agency has held its base fare steady during that time.

CTA also proposes a $5 increase in the cost of a 30-day pass. Reduced-fare rides will continue to be roughly 50 percent of base fares, which translates to an increase of 10-15 cents. All other fares and passes—including student fares—would remain at the current price.

These proposed fare increases are a difficult decision, and an option of last resort. But they are the only way to maintain the current high level of bus and rail service. No service cuts are included in the 2018 budget.

Since the State has not passed a capital bill since 2009, the CTA faces challenges in identifying the funding needed to continue the ongoing capital modernization of the bus and rail system. Not only is capital investment important to modernize the system, such investment reduces operating and maintenance expenses which, if left unchecked, can quickly lead to deteriorating service levels. Under the leadership of Mayor Rahm Emanuel, Chicago is the first city in the nation to institute a ride-hailing fee dedicated specifically to mass transit capital improvements. The new ride-hailing fee will enable the CTA to raise $179 million in bond funding for track and station upgrades. This new program—called *FastTracks*—will result in faster, more reliable rail service for thousands of CTA customers on the Pink, Green, Brown, Red and Blue Lines. The ride-hailing fee will also fund *Safe and Secure*, a program of security upgrades across the bus and rail system.

These investments will join a significant number of improvements planned for 2018. We recently celebrated the substantial completion of the newly reconstructed Wilson Red/Purple Line station and look forward to opening the new South Terminal at the 95th Street Red Line station—two of the biggest station projects in CTA history. We will break ground on the first phase of the transformative Red and Purple Modernization (RPM) project, a $2.1 billion investment to modernize and add capacity to the CTA's busiest rail corridor. That project is one of many one which CTA will pursue opportunities for transit-oriented development

The next phases of the Your New Blue program to modernize the rail line between downtown and O'Hare International Airport will include the start of work on a modernization of the Jefferson Park Terminal, and the creation of an iconic community gateway at the Belmont bus and rail facility. On the Green Line, work will begin to create the Garfield Green gateway, as well as enhancements to the Cottage Grove

station and the surrounding area.

CTA will continue to overhaul and refurbish its buses and trains to make them more reliable and more comfortable. We will continue basic but important maintenance and repairs to our track and signal system, which is key to ensuring smooth and reliable service. These strategic, capital investments in our system, have enabled CTA to achieve one of the lowest operating costs-per-mile of any major U.S. transit agency.

While we continue to push ourselves to operate more efficiently, we also remain focused on our longstanding efforts to promote community economic opportunity.

The CTA is committed to using our investments to open doors of opportunity for workforce and Small and Disadvantaged Business Entities (S/DBEs). Beginning in 2016, we accelerated our use of the Small Business Enterprise program to set aside contracts for bids from only S/DBEs. So far, over $5 million dollars have been awarded through this program. In addition, we added a component to our major contracts last year that gives an evaluation bonus to contract bidders who commit to additional workforce and DBE outreach, training, and support. On major projects, the CTA sets minimum requirements for the amount of work that must be performed by disadvantaged individuals through the WIOA dislocated worker program and, beginning in 2017, we established minimum requirements for the number of union apprentice hours that must be part of our major construction projects, further opening the doors of opportunity. We are taking a proactive approach to enabling more small businesses to work with the CTA. For example, our Green Line Small Business Initiative helped local businesses, most of whom have never worked with the CTA, learn the skills necessary to compete for work on upcoming CTA projects along the Green Line.

We also will continue to devote resources to our Second Chance program, which has transformed lives and put people on the path to productive careers. CTA's Second Chance program is an innovative initiative that provides valuable job skills and career opportunities to Chicago residents who often face challenges re-entering the workforce. An important component of the Second Chance program is the partnership with the City Colleges of Chicago to provide career-track training and networking opportunities.

Since 2011, more than 800 people have come through our program, in which participants work as rail car and bus servicers, cleaning buses and trains, undergoing training, and building a work record and skills that can put them on the path to self-sustainability.

For the last 70 years, CTA has been an integral part of the city's fabric. Our proposed 2018 budget continues our unprecedented modernization and investments, as well as our focus on efficient and affordable transit services. In 2018 CTA will continue to build on the progress toward our commitment to create a 21st Century transit experience.

Sincerely,

Dorval R. Carter, Jr.

[Printed page X]
[This is the CTA Organizational chart]

The Chairman of the Board and Board Members are at the top of the chart. Under the Chairman are the President and Chief of Staff/Chief Operating Officer. Internal Audit and Equal Employment Opportunity are between the President and the Chief of Staff.
Ten branches are under the President, as follows:
The first branch is Planning with Strategic Planning, Scheduling & Service Planning, Real Estate & Asset Management, Community Relations, and ADA below.
The second branch has General Counsel at the top, with Corporate Law and Litigation, Labor Policy & Appeals, Torts, and Claims below.
The third branch has Transit Operations at the top, with Bus Operations, Rail Operations, Transit Instruction, Vehicle Maintenance, and Facilities Maintenance below.
The fourth branch has Safety, Security, & Control Center Operations at the top, with Safety, Security, and Control Center below.
The fifth branch has Infrastructure at the top, with Power and Way, Engineering and Construction below.
The sixth branch has Strategy, Data & Technology at the top, with Technology, Data Analytics and Strategic Business Initiatives below.
The seventh branch has Finance at the top, with Accounting, Budget & Capital Finance, Treasury, Revenue and Finance & Payroll Systems below.
The eighth branch has Administration at the top, with Human Resources, Purchasing & Supply Chain, Diversity & DBE Compliance, Learning & Support, and Performance Management below.
The ninth branch is Legislative Affairs.
The tenth branch is Communications.

Executive Summary

2018: Investing in a 21st Century Transit System

OVERVIEW

The Chicago Transit Authority (CTA) provides approximately 1.5 million rides every day and more than 80 percent of transit trips across Chicago and 35 surrounding suburbs. As the city's largest public transportation network, and the second largest transit-provider in the United States, the CTA is a critical connector of people, jobs and communities.

Under the leadership of Mayor Rahm Emanuel and CTA President Dorval R. Carter, Jr., the CTA has focused on modernizing infrastructure, enhancing safety and security, enriching workforce development, and improving customer experience. In a survey released in 2017 by the RTA, the CTA earned a high customer satisfaction rating. The survey showed that 85 percent of customers said they were satisfied with CTA service and that 91 percent of customers would recommend the CTA to others. In the last six years, the CTA has announced, begun or completed more than $8 billion in modernization projects across the entire system. Those projects have not only improved service, but also served as a catalyst for neighborhood economic development, as well as job and contracting opportunities. The agency has also expanded the use of technology to improve performance and enhance customer information.

The 2018 Budget required balancing reduced state funding with the critical needs of the CTA. New operating revenue made possible by a modest fare increase, combined with a much-needed infusion of capital funding from the City of Chicago's ride-hailing fee, will allow CTA to maintain its current level of service and continue to make the significant investments needed to provide vital transit in the region.

CUSTOMER EXPERIENCE

Bus Service

CTA has made a priority of improving bus service, which provides slightly more than half of the nearly 500 million rides taken on CTA each year. Bus service improvements since 2011 include the creation of Loop Link and a new Union Station bus terminal to improve bus service and reliability in the city's downtown business district and the re-introduction of popular rush-period express bus service on two of the CTA's busiest bus corridors, Ashland and Western avenues, as well as a host of more improvements in 2017.

South Side bus service improvements
CTA bus customers enjoyed the first full year of enhanced bus service following CTA's expansion of service to six bus routes that serve Chicago's South and Far South Sides. Improvements have increased frequency, extended routing or lengthened service hours on the #4, #26, #34, #71, #95 and #119 bus routes which provide more convenient and more frequent service to thousands of bus riders each day.

Prepaid bus boarding
As part of CTA's continuing efforts to improve service and reliability for customers, the CTA has expanded its testing of allowing bus customers to prepay their fares ahead of boarding buses to three locations during select hours at 69th Red Line, Inner Drive Belmont and at the Belmont Blue Line CTA station. The goal of the pilots is to determine the effectiveness of prepaid bus boarding to make it quicker and easier to board CTA buses to increase service reliability.

Piloting new service
CTA in 2017 piloted new bus service, working closely with local communities to test demand for expanded service. CTA completed a pilot of extended service on the #11 Lincoln, continued a pilot of new service on 31st Street and began a new pilot on the #39 39th Street to provide weekend service.

[Photo: The 31 bus on its route]

South Halsted study
CTA kicked off a study with Pace along an 11-mile portion of South Halsted Street to determine ways to jointly improve service reliability and safety by looking at four CTA and Pace routes that serve South Halsted. The study will look at possible street and service modifications that could improve service and enhance mobility for the more than 11,000 Far South Side and south suburban customers who travel through the corridor and connect to the 95th and 79th Red Line stations each day.

Express bus service and traffic-signal prioritization
CTA has also devoted efforts to improving bus service by adding express bus service during morning and evening rush periods on Ashland and Western avenues, two of its busiest bus corridors. In addition, Transit Signal Priority (TSP) has been implemented on Ashland Avenue, between 95th Street and Cermak Avenue. Expansion of TSP is underway and will include the entire Western Ave corridor (79th to Howard), and the remainder of the Ashland Ave corridor (Cermak to Irving Park). TSP helps further increase bus speed and reliability on these high-traffic streets.

Rail Service

Targeted improvements
CTA added service to four of our eight rail lines, including the Red, Blue, Green and Purple Lines. All of the new service was implemented to benefit customers traveling during AM and PM rush, with trains operating more frequently during peak hours.

Maintained service during large capital improvement projects
Throughout multiple large-scale construction and maintenance projects, CTA has made every attempt to maintain service during construction to minimize the disruption to commuters. Two examples include the three-track operation during the Wilson station construction project and the off-peak Red Line South reroutes during the 95th Street Terminal Improvement Project.

FastTracks Program
The FY18 CTA Budget includes new capital funding to reduce and prevent slow zones on the rail system. These targeted investments, known as *FastTracks,* will result in faster, more reliable service for CTA customers. This new program is possible due to the innovative new ride-hailing fee from the City of Chicago. This innovative capital funding will fund track and power improvements on south branch of the Green Line, the Lake Street branch of the Green and Pink lines, the Blue Line's O'Hare and Congress branches, the Red and Blue Line subways, and the northern end of the Brown Line.

Accessibility

Commitment to accessibility

CTA continues to make progress on its goal of making its entire system 100 percent accessible to all customers, including individuals who use wheelchairs and mobility devices. CTA added elevators at the Addison Blue Line and Quincy Loop Elevated stations, as well as at the new Washington/Wabash Loop Elevated station, which opened in 2017. CTA works with accessibility rights advocates and regularly meets with its ADA Advisory Committee.

All Stations Accessibility Plan
The agency intends to release its All Stations Accessibility Plan that will serve as a blueprint on how to make all CTA rail stations fully accessible in the next 20 years. Currently, 101 of 145 rail stations are accessible.

Technology

Ventra app
Less than two years after being launched, the popular Ventra transit app reached a new milestone of being downloaded more than 2 million times and used to purchase nearly $250 million in fares. The Ventra app is the first transit app in the nation allowing customers to pay for rides on multiple transit systems – CTA, Metra and Pace.

CTA Night Game Alerts pilot
CTA is the first major transit agency to offer a special texting service in which customers can sign up to receive text alerts about Cubs night games and the potential for heavier than normal train crowds during the evening rush on the Red Line. The pilot program in some cases offered incentives to some customers to change their travel pattern for that evening by traveling before 5 p.m. or after 6 p.m.

Train and Bus Tracker
Committed to providing CTA customers with real-time information that makes their commutes easier, CTA has expanded the number of train tracker displays at rail stations to 733, up by 275 over the last 24 months. CTA has also installed a total of 163 urban panels (advertising and train information panels at street level adjacent to the station)—43 in the past year—which are located on the street and visible to customers before they enter rail stations.

Public Art

Transit artwork
CTA's collection of public art has nearly doubled since 2011, with more than 70 works of art across all eight rail lines and including mosaics, art glass and sculptures created by nationally and internationally acclaimed artists, many of whom are from Chicago.

Expansion of artwork collection
Over the next few years, CTA's public art collection will further expand to include nearly a dozen new works of art. CTA in 2017 unveiled artwork designs developed by internationally acclaimed artists Theaster Gates and Cecil Balmond for CTA's new 95th Street Terminal and Wilson Red-Purple transfer station, respectively, and held several community meetings with artists who will develop artwork for other CTA rail stations.

[Photo: CTA public artwork display]
New art initiative
CTA in 2017 joined the City of Chicago in its announcement of the city's Year of Public Art (YOPA) initiative to highlight perspectives of Chicago artists & neighborhoods with new, illuminated light boxes

to be installed at select rail stations to enhance the interiors of stationhouses and provide visual engagement for transit riders.

SAFETY AND SECURITY

Safety Management System (SMS)
CTA has worked at every level of the organization to strengthen its safety culture and ensure staff are following best practices in all aspects of daily operations. CTA was the first transit agency in the nation to assist in the development of the Safety Management System, or SMS, which is being led by the Federal Transit Administration (FTA) to develop uniform standards to upgrade and ensure safety for transit operations throughout the country. SMS is an integrated collection of guidelines, policies and processes designed to help identify and mitigate risk in transportation by engaging people, process and technology. The SMS ensures a safety culture by using a top down and bottom up approach across CTA to promote safety and the understanding of risk.

Security
The CTA is one of the only major transit agencies in the nation featuring system-wide security cameras to improve safety and security for its passengers. With about 32,000 cameras on every bus and train and at every rail station, the extensive camera network has proven to be an invaluable tool for police and their investigations into crimes committed either on or near CTA property. These cameras have been successfully used in detecting crime patterns and identifying offenders involved in both reported and unreported crimes. The security cameras have aided police in the investigation, arrest and conviction of more than 1,200 individuals in connection with reported incidents on or near CTA properties between June 2011 through the end of 2016.

Safe and Secure
In addition to the *Fast Tracks* program funded by the City's ride-hailing fee, *Safe and Secure* will bring a host of improvements to locations across the CTA system. Planned improvements include system-wide security camera improvements, including new and upgraded cameras, as well as station security enhancements entailing multiple components such as lighting and repairs.

Workforce Development

U.S. Employment Plan and rail car purchase
CTA's plan to purchase 846 new rail cars was first announced in 2016. The rail car purchase was historic for two reasons: It was the largest rail car order in agency history, and it was the agency's first use of the U.S. Employment Plan in procurement. The U.S. Employment Plan uses an innovative approach of using public transportation funds to create good jobs in the United States, by focusing on leveraging the purchases of buses and trains to help create job opportunities for the underemployed. In 2017, the contractor selected for the rail car manufacturing broke ground on a new final assembly plant on the city's Far South Side, which will create 170 new jobs in Chicago.

DBE outreach and inclusion
CTA's workforce development efforts include programs to certify and educate companies as Disadvantaged Business Enterprises—or DBEs to increase their chances of participation in CTA contracts; DBE meet and greets with prime contractors; participation in job fairs and partnering with local community groups with major CTA projects to ensure access to jobs and training.
[Photo: DBE outreach and inclusion meeting]

Procurements

Because CTA believes in investing in communities, CTA now requires a diversity outreach and workforce plan for all construction contract bids. The workforce plan is a part of the scoring process CTA uses in selecting contractors by asking bidders to demonstrate how they will engage the community to connect local residents with CTA construction jobs. This is in addition to the CTA's commitment to requiring certified DBE participation in CTA contracts.

Contractor pools
CTA has also developed a mid-level contractor pool and a contractor management services pool to help smaller companies participate in more CTA projects.

Small Business Initiative
In 2017, CTA launched its Green Line Small Business Initiative, a program focused on providing training and assistance to Small and Disadvantaged Business Enterprises (S/DBEs) so they can compete for work related to upcoming improvements planned for Green Line stations. Program participants engaged in a five-course educational series hosted by CTA and received instruction from key CTA contractors who provided their insight on best practices, managing and understanding projects, project reporting and other subject areas.

Promoting community opportunity
CTA believes that investment in transit is an investment in local communities, which is why the agency has devoted significant effort to workforce development, from requiring CTA contracts to have workforce development plans to providing ongoing training to small businesses seeking to work with CTA.

CTA also provides career development opportunities to a variety of Chicago residents through its multiple internship programs. In addition to offering high school students a mechanics vocational internship program during the summer months, for the past two years CTA has also partnered with the City of Chicago's One Summer Chicago (OSC) program to offer more than 115 high school students meaningful and paid, part-time employment opportunities. These programs complement CTA's year-round and highly competitive college internship program, which this year has had more than 55 undergraduate- and graduate-level interns representing 30 colleges and universities from around the country.

CTA's Second Chance program
One of the largest programs of its kind in the country, CTA's Second Chance program provides opportunities for non-violent ex-offenders, victims of domestic abuse and others facing barriers to employment. Second Chance is a holistic program that provides training, educational opportunities, and support to help participants get back on their feet. CTA partners with social services agencies to find candidates and with City Colleges of Chicago to provide Second Chance participants with a wide array of in-class education, hands-on training, and networking opportunities to further develop their foundation. To date, more than 800 non-violent ex-offenders who have entered this invaluable program and more than 225 participants have secured permanent employment at CTA. Many others have secured permanent jobs elsewhere because of their experience at CTA.

[Photo: Second Chance Program participant working on train car]

MODERNIZATION INVESTMENT

Major Modernization Programs

Red and Purple Modernization
The CTA is undertaking the largest capital improvement project in CTA history: the Red and Purple Modernization Program (RPM). This major initiative will completely rebuild the nearly century old North Red Line from Belmont to Howard and the Purple Line from Belmont to Linden in Wilmette. The project will increase much needed capacity in this growing residential corridor to accommodate current and future riders, and to deliver faster and smoother rides with less crowding and more frequent service. This massive, multi-stage project is scheduled to be completed in several phases, which allows us to make the greatest number of improvements while minimizing impacts on riders and the surrounding communities. CTA is proceeding with RPM Phase One, which will completely rebuild the Lawrence, Argyle, Berwyn and Bryn Mawr stations and all the tracks and support structures for more than a mile adjacent to the stations and construct a Red-Purple Bypass just north of Belmont station for northbound Brown Line trains to modernize the 100-year-old Clark junction where Red, Purple and Brown Line trains currently intersect.

Your New Blue
CTA in 2017 continued to move forward with its ambitious *Your New Blue* modernization of the O'Hare branch of the Blue Line by continuing a key component of that effort, rehabilitating rail stations used by thousands of people each day. The agency awarded a construction contract to design and renovate two of the Blue Line's busiest transit hubs serving nearly 4 million rail passengers annually, Jefferson Park and Belmont Blue. The projects will improve boarding and the overall station environment for bus and train customers, following a number of completed projects on the O'Hare branch that include the rehabilitation of eight of 14 stations and track improvements that increase service reliability for customers.

Red Line Extension
CTA continues to move forward with its planning for the proposed $2.3 billion Red Line Extension project between 95th and 130th streets. The proposed 5.3-mile extension would include four new, fully accessible stations at 103rd Street, 111th Street, Michigan Avenue and 130th Street. The project would provide a one-seat ride for far South Side residents from 130th Street to downtown, fostering economic development and improving resident access to jobs and education. In the fall of 2016, CTA published a Draft Environmental Impact Study (DEIS) on the two alignment options for the project and is expected to select a final alignment in early 2018.

Station Projects

Wilson Red Line
The Wilson Station Reconstruction Project has reached a major milestone in 2017 in this transformational project with the opening of the new, modern Wilson main stationhouse, replacing a badly deteriorated structure with a bright, spacious stationhouse that has an elevator that made the station fully accessible to all customers. The CTA was on track to, by the end of 2017, complete remaining project work, including finishing the other two entrances, opening a second new platform, the rehabilitation of the historic Gerber building at Wilson/Broadway, completing remaining track structure work, and beginning Purple Line stops at Wilson to allow customers to transfer between Red and Purple Line trains.

[Photo: New Wilson main stationhouse]

Quincy
CTA in 2017 began its $18.2 million project to renovate the historic Quincy Loop station and make the 120-year-old station fully wheelchair accessible, while preserving its renowned historic appearance. It's

the largest renovation in nearly 30 years for Quincy, which is one of CTA's oldest stations and was built in 1897.

95th Street Terminal
The CTA continued to make progress on the new 95th Street rail and bus terminal, which serves about 20,000 customers each weekday. CTA is replacing the cramped, outdated structure at 95th Street with a modern, airy and expanded terminal featuring a bold design.

The new terminal will feature passenger structures on both the north and south sides of 95th Street, connected by an enclosed pedestrian walkway as well as improved and safer areas to board and alight buses. First begun in 2014 with the construction of a new foundation above the Dan Ryan Expressway, the CTA in 2017 made significant progress on the new south terminal and the area in which buses will drop off and board passengers. Both the north and south terminals will be completed in 2018.

[Photo: 95th Street Terminal plan]

Washington/Wabash
CTA and the City of Chicago opened the Washington/Wabash station in 2017, the first new downtown 'L' station to open in 20 years. The architecturally remarkable station combines form and function, providing a new access point to the east Loop and Millennium Park. The $75 million station, which is fully accessible to customers with disabilities, replaces two stations that were built more than 120 years ago.

[Photo: Washington/Wabash train platform]

Illinois Medical District
CTA reached a milestone in 2017 in the $23 million renovation of the Illinois Medical District (IMD) Blue Line station with the reopening of its rehabilitated Damen Avenue entrance. The IMD station is now undergoing renovations of its main entrance on Ogden Avenue, including the addition of an elevator, as well as a renovation of its Paulina Avenue entrance. The IMD station serves more than 940,000 riders annually and provides access to four major hospital systems located within the nation's largest urban medical district.

[Photo: Illinois Medical District Blue Line station animation]

Garfield Gateway
CTA moved forward on the $50 million Garfield Gateway Project by awarding a construction contract to begin major improvements to the Garfield Green Line station and streetscape to create a strong community focal point on Chicago's South Side and an iconic gateway to the Washington Park community. The project will be completed in 2018.

Damen Green Line
CTA and the City of Chicago announced plans for a brand-new CTA station on the Green Line at Damen Avenue. The new station will fill a 1.5-mile gap between existing Green Line stations at California and Ashland to better serve the growing business corridor and residential neighborhood on Chicago's Near West side.

Cottage Grove
CTA announced it would develop concepts to improve the Cottage Grove Green Line station for customers, complementing plans by the City of Chicago for redevelopment around the station at 63rd

Street and Cottage Grove Avenue as part of ongoing redevelopment and renewal in the Woodlawn neighborhood. CTA is studying alternatives and funding sources for station enhancements.

Fleet

CTA has in recent years focused extensive efforts on investing in a younger rail and bus fleet to provide customers with a more comfortable, reliable commute and lower the agency's maintenance and repair expenses.

Rail car investment
CTA in 2016 awarded a contract for the newest generation of CTA rail cars—the 7000-series. The newest rail cars—to be built by CRRC Sifang America JV, will be assembled at a new facility, for which CRRC broke ground in Spring 2017. These 7000-series vehicles are the first railcars purchased by CTA in more than a decade since 2006, when the 5000-series contract was awarded to Bombardier. The first rail car prototypes are expected to be completed in 2019.

CTA continued its overhaul of more than 250 3200-series rail cars, which were built in 1992 and 1993. The overhauled 3200s, which currently operate on the Brown and Orange Lines will replace many of the cars' major operating systems, including the installation of new air conditioning systems and the rebuilding of the propulsion system, passenger door motors and wheel and axle assemblies.

[Photo: CTA train stopped at platform]

Bus investment
Since 2012, CTA has purchased 425 new buses, replacing buses that were more than 15 years old. In addition, CTA has performed mid-life overhauls on more than 1,000 buses to extend their lifespans and make them more environmentally friendly than when they were brand new. The agency will soon move forward with plans to expand its electric bus fleet from two electric buses to between 20 and 30 more electric buses.

In 2017, CTA expanded its bus overhaul efforts by announcing its $54 million plan to overhaul 208 hybrid 60-foot articulated buses – the longest buses in its fleet serving many of the busiest bus routes in the city. The overhaul program will provide CTA customers with cleaner, greener and more reliable buses.

Electric buses
In October 2017, CTA issued a request-for-proposal to purchase up to 45 all electric 40' foot buses with en-route charging technology. These new electric buses are in addition to the two all-electric 40' buses purchased in 2014. CTA is meeting with Alderman and community leaders in areas where the new charging stations are planned, and also working closely with ComEd to ensure that electrical service will be sufficient to enable fast-charging the electric buses.

<u>PROMOTING CTA</u>

CTA's 70th anniversary
CTA turned 70 years old in 2017. The agency was formed in 1947 to take ownership of predecessor rail companies. Throughout 2017, CTA hosted a series of events and activities, including tours, ridership promotions, contests and giveaways, to celebrate its anniversary. CTA's Heritage Fleet—consisting of vintage trains and buses—made public appearances as part of the celebration. The CTA launched an Instagram account --@ChicagoCTA-- to showcase historical photos, many of them rarely seen.

[Photo: CTA's 70th anniversary logo]

125th anniversary of rail service
2017 also marked the 125th anniversary of Chicago's historic 'L' train system—known around the world as one of the city's most iconic symbols. To celebrate, the CTA offered train rides on vintage railcars from CTA's Heritage Fleet, the 4000-series, built in 1923, and the 2400-series, built between 1976-78.

Pride Train
CTA in 2017 debuted the "Pride Train," a train with rail cars wrapped with the rainbow Pride flag on the Red Line, to join the city in celebrating Pride Weekend and to support equality and inclusion. CTA also offered Pride-themed Ventra tickets at stations across the city.

[Photo: CTA's pride train on the tracks]

Community bus
In 2017, CTA debuted its new Community Bus, a CTA-branded and staffed bus deployed to neighborhoods throughout the city to provide travel information and serve as a brand ambassador for CTA. A hit at popular events including Lollapalooza, Jazz Fest and other festivals, CTA ambassadors interacted with customers, who won CTA prizes for spinning a game wheel, recharged their phones at charging stations and cooled off inside the bus on warm summer days.

[Photo: CTA's Community Bus on the road]

Ridership promotion
Promoting ridership of the CTA and its benefits for everyone was a priority in 2017. New marketing programs included outreach to employers and employees about the benefits of signing up for pre-tax CTA transit benefits, mailing Ventra welcome packets to new residents, and promoting the benefits of 1-, 3-, 7- and 30-day unlimited ride passes to customers.

New Resident Program
In August 2017, CTA launched its New Resident Program, a direct mail campaign designed to attract new Chicagoland residents to CTA buses and trains through an introductory ride offer. The mailer includes a new Ventra card, plus information about CTA, Ventra card registration and pass pricing.

Commemorative farecards
Over the past few years, CTA has developed a number of specialized farecards, including the Pride Parade, the 2016 World Series and others. In 2017, we expanded our promotion with the Chicago Marathon and both the 70th Anniversary of the CTA and the 125th Anniversary of the 'L.'

[Photo: 2017 Chicago Marathon commemorative farecard]

CONCLUSION

As we celebrate our rich past and importance to Chicago, we always have an eye on the future. And we know that transportation in the 21st century is increasingly about options. The CTA is committed to moving our agency forward for our customers by making sure public transit is competitive and adequately able to continue to play a vital role in keeping the city moving by safely and conveniently helping travelers get from point A to Point B.

The CTA's 2018 Budget is balanced and fiscally responsible and takes a holistic approach towards providing quality transit service for our customers. Our goals always include working to improve the commuting experience by investing in our system and modernizing our infrastructure for both today and for the future.

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STRATEGIC GOALS

The strategic priorities outlined below reflect CTA President Dorval R. Carter, Jr.'s vision for the agency. The CTA provides the Chicago region with on-time, affordable, convenient transportation that connects people, places, and jobs. Since he was named President in 2015, President Carter has been committed to three key priorities: enhancing safety, improving the customer experience, and workforce development. The 2018 Budget reflects these important goals.

CTA MISSION STATEMENT

We deliver quality, affordable transit services that link people, jobs and communities.

CTA VALUES

CTA provides safe, clean, on-time, courteous and efficient transit services. We accomplish our mission with a diverse workforce that embodies the following values:

Courteous - We will create a pleasant environment for ourselves and our customers.

Innovative - We will seek out and encourage employees who initiate change, improvement, learning and advancement of our goals.

Motivated - We will meet each task with spirit, enthusiasm and a sense of pride to be second to none.

Professional - We will provide transit service with the highest standards of quality and safety for our customers and ourselves.

Reliable - We will be dependable for our customers and fellow employees, and will maintain the highest standards of trust.

Results-Oriented - We will focus on getting the job done and will derive personal satisfaction from the service we provide.

STRATEGIC PRIORITIES FOR FY 2018 BUDGET

Safety - CTA aims to ensure our customers and employees have a safe and secure transit system and workplace that prioritizes safety over all other aspects of service delivery.

Customer Experience - CTA places a high priority on putting the customer at the center of every decision made and action taken to ensure our services meet or exceed customer expectations.

Workforce Development - CTA invests in its workforce to build on the successes of the past and work toward a bright future, creating jobs and opportunity as we provide residents and visitors of the Chicago region with high quality transit service into the future.

[Photo- Three-way flowchart showing inter-relationship between Safety, Customer Experience, and Workforce Development]

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2014-2020 Operating Budget Schedule (Dollars in thousands)

	Actual 2014	Actual 2015	Actual 2016
Operating Expenses			
Labor	$965,868	$1,002,486	$1,027,047
Material	80,963	83,507	82,921
Fuel	59,476	49,830	32,738
Power	33,568	28,818	29,283
Provisions for Injuries and Damages	3,500	13,000	10,500
Purchase of Security Services	13,628	14,431	14,095
Other Expenses	242,910	252,054	267,558
Pension Obligation Bonds (Net)	115,746	112,281	111,779
Contractual Services	94,334	104,278	105,003
Utilities	23,059	24,562	23,234
Non-Capital Grant, Travel, Leases, Other	9,771	10,933	13,243
Other Debt Service	0	0	14,298
Total Operating Expenses	$1,399,913	$1,444,126	$1,464,142
System Generated Revenue			
Fare and Passes	$583,299	$587,108	$577,007
Reduced Fare Subsidy	28,321	14,606	14,385
Advertising, Charter & Concessions	27,561	31,241	35,019
Investment Income	422	1,123	1,608
Statutory Required Contributions	5,000	5,000	5,000
Other Revenue	36,073	36,439	43,550
Total System Generated Revenue	$680,675	$675,518	$676,569
Public Funding			
Sales Tax I	$343,087	$360,575	$365,622
Sales Tax II	58,022	56,760	57,611
PTF II	63,667	66,913	67,936
RETT	63,150	74,724	79,063
PTF II on RETT	15,058	19,566	19,594
Non-Statutory Funding (Sales Tax I, PTF I and Other)	196,254	214,471	218,922
Innovation, Coordination and Enhancement Funding*	-	-	1,000
Total Public Funding	$739,238	$793,008	$809,748
Total Operating Revenue	$1,419,913	$1,468,526	$1,486,317
Short-term Borrowing	$0	$0	$0
Balance	$20,000	$24,400	$22,175
Recovery Ratio*	58.46%	56.02%	55.21%
Required Recovery Ratio	54.00%	54.50%	54.50%

*Recovery ratio is calculated by dividing System-Generated Revenue by Operating Expenses. The calculation includes (i) in-kind revenues and expenses for security provided by the City of Chicago, (ii) excludes security expenses, Pension Obligation Bond debt service, ICE grant and depreciation and (iii) includes a portion of senior free ride revenue and certain grant revenues.

Note: Totals may not add due to rounding.

	Budget 2017	Forecast 2017	Proposed Budget 2018	Plan 2019	Plan 2020
Operating Expenses					
Labor	$1,050,436	$1,038,392	$1,046,059	$1,066,980	$1,088,320
Material	89,176	87,555	92,425	96,600	97,082
Fuel	33,946	28,930	33,576	34,583	35,620
Power	31,365	28,062	31,369	32,624	33,929
Provisions for Injuries and Damages	9,500	3,167	5,000	10,000	10,000
Purchase of Security Services	16,838	17,304	17,804	18,160	18,523
Other Expenses	292,978	263,804	288,263	317,443	330,059
Pension Obligation Bonds (Net)	111,943	103,644	112,535	115,911	120,058
Contractual Services	109,349	96,074	109,063	114,772	117,651
Utilities	24,152	22,152	23,250	23,948	24,666
Non-Capital Grant, Travel, Leases, Other	18,938	13,338	14,468	19,506	20,091
Other Debt Service	28,597	28,597	28,947	43,308	47,593
Total Operating Expenses	$1,524,239	$1,467,213	$1,514,495	$1,576,389	$1,613,533
System Generated Revenue					
Fare and Passes	$581,250	$560,377	$583,105	$586,021	$590,951
Reduced Fare Subsidy	28,322	14,606	28,322	28,322	28,322
Advertising, Charter & Concessions	35,165	35,269	38,347	39,114	42,396
Investment Income	1,121	2,100	1,600	1,600	1,600
Statutory Required Contributions	5,000	5,000	5,000	5,000	5,000
Other Revenue	35,489	33,345	51,202	63,631	68,090
Total System Generated Revenue	$686,347	$650,697	$707,576	$723,687	$736,359
Public Funding					
Sales Tax I	$386,920	$370,873	$381,224	$392,660	$404,440
Sales Tax II	65,014	59,290	59,580	59,160	57,842
PTF II	70,766	66,658	65,212	73,282	75,480
RETT	64,690	64,690	66,631	68,630	70,689
PTF II on RETT	16,173	16,173	16,658	17,158	17,672
Non-Statutory Funding (Sales Tax I, PTF I and Other)	228,200	215,457	211,577	235,594	244,647
Innovation, Coordination and Enhancement Funding*	6,129	5,875	6,037	6,218	6,405
Total Public Funding	$837,892	$799,016	$806,919	$852,702	$877,175
Total Operating Revenue	$1,524,239	$1,449,713	$1,514,495	$1,576,389	$1,613,533
Short-term Borrowing	$0	$17,500	$0	$0	$0
Balance	$0	$0	$0	$0	$0
Recovery Ratio*	54.92%	54.77%	57.12%	55.76%	55.23%
Required Recovery Ratio	54.75%	54.75%	54.75%	54.75%	54.75%

*Recovery ratio is calculated by dividing System-Generated Revenue by Operating Expenses. The calculation includes (i) in-kind revenues and expenses for security provided by the City of Chicago, (ii) excludes security expenses, Pension Obligation Bond debt service, ICE grant and depreciation and (iii) includes a portion of senior free ride revenue and certain grant revenues.

Note: Totals may not add due to rounding.

2017 Operating Budget Performance Summary

Overview

The 2017 operating expense forecast is projected to be $1,467.2 million, which is 3.7 percent lower than the 2017 budget of $1,524.2 and 0.2 percent higher than 2016 actuals. Operating revenues are projected to be $1,449.7 million which is 4.9 percent lower than budget and 2.5 percent lower than 2016 actual. The CTA forecasts a $17.5 million shortfall between expenses and revenues for 2017. The $17.5 million shortfall will be covered with short-term borrowing that will be repaid with further efficiencies or excess revenue growth.

The 2017 expense projection reflects CTA's continuous efforts to aggressively manage spending levels due to declining ridership and slower than expected growth in public funding. The 2017 operating budget forecast will end the year $57.0 million below budget and $3.1 million above 2016. CTA was able to reduce expenses in 2017 through aggressive cost savings initiatives in labor, fuel, power and contractual expenses, while still supporting enhanced bus and rail service levels for the south side, increased security on CTA's rail system, and increased debt service expenses.

System-generated revenues are projected to be $650.7 million, or $35.7 million below the 2017 budget and $25.9 million below 2016 actual. Compared to budget, the decline in system-generated revenue is due to lower bus and rail ridership along with a reduction in the reduced fare subsidy. Public funding is estimated to be $799.0 million, which is $38.9 million or 4.6 percent lower than budget. Public funding revenues are impacted by lower than expected sales tax revenues and a reduction in public funding by the State of Illinois enacted with its State Fiscal Year (SFY) 2018 budget.

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FY17 Forecast - Operating Expenses

[Picture: Pie Chart of 2017 Operating Expense Forecast in $ Millions]

Expense Category	$ in Millions	Percentage
Labor	$1,038.4	71%
Material	$87.6	6%
Fuel	$28.9	2%
Power	$28.1	2%
Provision for Injuries and Damages	$3.2	0%
Purchase of Security Services	$17.3	1%
Other Expenses	$263.8	18%

The 2017 labor expense is projected to be $1,038.4 million, which is lower than the 2017 budget of $1,050.4 million by $12.0 million or 1.1 percent, but higher than 2016 actual labor expense by $11.3 million. The labor forecast is higher versus 2016 mainly due to enhanced service levels for the Far South Side Improvement Plan and increased pension costs.

Material spending for 2017 is forecasted to be $87.6 million, which is $1.6 million or 1.8 percent lower than budgeted levels, but $4.6 million or 5.6 percent higher than 2016. The 2017 forecast includes the impact of additional maintenance due to the Far South Side Improvement Plan and the cost to maintain the rail fleet.

The 2017 forecasted expenditure for diesel fuel for CTA's revenue fleet is $28.9 million. This forecast is $5.0 million below the original 2017 budget and $3.8 million less than the 2016 actual diesel expenditure. The fuel savings versus prior year is primarily due to favorable pricing. At the beginning of 2017, CTA had locked in pricing for 50 percent of its estimated fuel usage. Additional purchases, up to 80 percent of estimated usage, locked in relatively low prices and increased budget certainty. CTA is continuing its cost management practice of purchasing a higher-priced diesel blend ("D1") only when that blend is required for cold weather operations.
CTA's 2017 forecast expenditure for traction (rail service) electric power is $28.1 million. This forecast is $3.3 million below the original 2017 budget and $1.2 million less than the 2016 actual traction power expenditure. Two key factors contributed to this cost reduction. First, in 2017 CTA implemented a new electric power purchasing strategy, which price-locks a set percentage of actual consumption. Second, traction power consumption decreased by nearly 7.0 percent from 2016 to 2017, driven primarily by mild seasonal weather. Partially offsetting these cost reduction factors, the Illinois Future Energy Jobs Act ("FEJA") became effective in June 2017, resulting in additional utility charges for zero-emissions (nuclear) and renewable energy. FEJA also exempted CTA's traction power accounts from fees associated with Illinois' state-wide energy efficiency program.

Provision for injuries and damages represents expenses for claims and litigation for incidents that occur on CTA property, as well as incidents involving CTA vehicles. This amount is suggested by the CTA's actuaries and reviewed annually. It is based on actual claims history and future projections. The amount in the injuries and damages reserve exceeds total projected liabilities. The $3.2 million forecasted reserve is $6.3 million less than the 2017 budget of $9.5 million due to sufficient funding levels per the actuaries.

Purchase of security services expenses are forecasted to be $17.3 million, which is $0.5 million higher than budget and $3.2 million higher than 2016 actual expenses. The increase in expenses is due to the increased contracted security levels on the rail system. The security services budget consists of expenditures for intergovernmental service agreements with officers from the Evanston, Oak Park, Forest Park and Chicago police departments, as well as contracts with other private security firms. The Public Transportation Section of the Chicago Police Department also provides services to CTA customers during the course of its regular patrols.

Other expenses are projected to be $263.8 million, $29.2 million or 10.0 percent lower than budget, and $3.8 million less than 2016 actual. The decrease versus prior year is mainly due to reduced contractual and utility expenses. Non-capital grant expense represents a pass-through grant which is offset by an equal amount of grant revenue (classified as Other Revenue).

FY17 Forecast - Operating Revenues

System-Generated Revenues
[Picture: Pie Chart of 2017 System-Generated Revenue Forecast in $ Millions]

Revenue Category	$ in Millions	Percentage
Fare and Passes	$560.4	86%
Reduced Fare Subsidy	$14.6	2%
Advertising. Charter & Concessions	$35.3	6%
Investment Income	$2.1	0%
Statutory Required Contributions	$5.0	1%

Other Revenue	$33.3	5%

System-generated revenues are projected to be $650.7 million. This is $35.6 million lower than the original 2017 budget of $686.3 million, and a $25.9 million decrease compared to the 2016 actual level. The lower system-generated revenue compared to budget is primarily due to lower fare revenue and reduction in state reduced fare subsidy.

Regular fares and passes make up the majority of system-generated revenues. Revenue from fares and passes is forecasted to be $560.4 million. Fare and pass revenue is projected to be $20.9 million lower than the original 2017 budget and $16.6 million lower than the 2016 actual amount. This decrease is due to a decline in ridership in 2017 as gas prices have trended near historic lows, car usage has increased as well as competition from ride-hailing alternatives such as Uber and Lyft. The average fare paid in 2017, including cross-platform transfers, is projected to be $1.17.

[Picture: Vertical Bar Graph of CTA Farebox Revenue 2012-2017 (Forecast) in $ Millions]

Year	Farebox Revenue
2012	$548.8
2013	$574.0
2014	$583.3
2015	$587.1
2016	$577.0
2017 Forecast	$560.4

The reduced-fare subsidy is the State of Illinois' reimbursement to the CTA, Metra and Pace for discounted and free fares given to seniors and people with disabilities. The forecasted total for 2017 is $14.6 million, reflecting almost a 50 percent reduction in the historic funding for this program. The 2018 Budget passed by the State of Illinois in July 2017 did not restore the reduced-fare subsidy to $28.3 million, which was anticipated in the 2017 budget. The CTA continues to work with the other service boards and the RTA to restore this critical piece of funding to its historic levels in order to comply with important federal and state mandates.

Advertising, charters and concessions revenues in 2017 are projected to be $35.3 million, exceeding budget by $0.1 million and $0.3 million more than 2016. The year-over-year growth is due to an increase in advertising revenues.

Investment income is estimated to be $2.1 million, which is $1.0 million higher than budget due to higher yielding securities almost $0.5 million more than 2016 actuals. Overall, the level of investment income is minimal due to historically low interest rates.

Statutory required contributions will meet the budgeted amount of $5.0 million per the Regional Transportation Authority Act, which requires the City of Chicago and Cook County to contribute $3.0 million and $2.0 million, respectively, to CTA operations each year.

Other revenues, which include parking fees, sale of real estate, rentals and miscellaneous revenue, are projected to be $33.3 million, which is $2.1 million lower than the 2017 budget, primarily due to lower than expected revenue from surplus property sales.

Public Funding

[Graph: Pie Chart of 2017 Public Funding revenue forecast in $ Millions]

Funding Category	$ in Millions	Percentage
Sales Tax I	$370.9	46%
Sales Tax II	$59.3	8%
PTF II	$66.7	8%
RETT	$64.7	8%
PTF II on RETT	$16.2	2%
Non-Statutory Funding (Sales Tax I, PTF I, and Other)	$215.5	27%
Innovation, Coordination, and Enhancement Funding	$5.9	1%

Public funding for 2017 was budgeted at $837.9 million, reflecting projections by the RTA of strong sales tax growth. However, actual sales tax revenues have fallen short of budgeted projections. In addition, the State of Illinois 2018 fiscal year budget, effective July 1, 2017, instituted a permanent 2 percent surcharge on RTA sales tax receipts and a 10 percent reduction in the State's 30 percent Public Transportation Fund matching funds for SFY2018 only. As a result, the RTA re-forecasted CTA's public funding for 2017 to be $799.0 million, 4.6 percent or $38.9 million below the original budget.

Short-term Borrowing

The public funding reductions by the State of Illinois as part of its SFY2018 Budget were unanticipated by the RTA and CTA. The CTA's public funding requirement to maintain operations is $816.5 million, leaving a $17.5 million shortfall in the budget. CTA plans to fill this gap with short-term borrowing.

Ridership

Ridership in 2017 is forecasted to be 480.1 million passenger trips, a 3.5 percent decrease from the 497.7 million trips in 2016. The bus ridership forecast is for 248.9 million, a 3.9 percent decrease versus 2016, while rail ridership is projected to be 231.2 million trips, a 3.1 percent decrease.

Consumer gas prices have remained low, which has made it easier for customers to drive as an alternative to taking transit. The increased popularity and competition from low-priced ride-hailing services including Uber, Lyft and Via have also negatively impacted ridership.

[Picture: Line Graph of Ridership 2010-2017 (Forecast) in Millions]

Year	2010	2011	2012	2013	2014	2015	2016	2017 (Forecast)
System	516.9	532.0	545.6	529.2	514.2	516.0	497.7	480.1
Bus	306.0	310.4	314.4	300.1	276.1	274.3	259.1	248.9
Rail	210.8	221.6	231.2	229.1	238.1	241.7	238.6	231.2

Average weekday ridership for 2017 is projected at 1.539 million per day, which is 3.0 percent lower than 2016 weekday ridership. Weekday bus ridership is projected to be down 3.4 percent, while rail ridership is projected to be down 2.5 percent.

Average Saturday ridership for 2017 is projected to be 934 thousand per day, which is a decrease of 4.0 percent from 2016 Saturday ridership. Average Saturday ridership for bus is projected fall to 4.5 percent while average Saturday ridership for rail is projected to fall 3.5 percent.

Average Sunday/holiday ridership for 2017 is projected to be 688 thousand per day, which is a 4.3 percent decrease from 2016 Sunday/holiday ridership. Average bus ridership on Sundays/holidays is expected to fall 4.0 percent while rail ridership is expected to fall 4.6 percent.

President's 2018 Proposed Operating Budget Summary

Overview

The CTA's Proposed 2018 Operating Budget is $1,514.5 million and preserves bus and rail service while continuing an unprecedented investment in modernization that has occurred since 2011. Due to unanticipated reductions in public funding by the State of Illinois for SFY2018 totaling $33.0 million, the CTA is proposing a modest fare increase to base fares and the 30-Day Full Fare Pass. Reduced base fares will continue to be at or near 50 percent of the base fares. This increase would be the first change in the base fares since 2009. The fare increase is anticipated to generate $23.0 million in additional fare revenue to assist in closing the budget gap.

Expenses for the 2018 Operating Budget are lower than the 2017 budget by $9.7 million and higher than the 2017 forecast by $47.3 million. The major assumptions outlined in the 2018 budget include preserved bus service levels and increased material costs due to an aging bus and rail fleet. These increases are offset by modest year over year savings in fuel due to CTA's strategic efforts to pre-purchase fuel.

System generated revenues are projected to be $707.6 million, $21.2 million higher than the 2017 budget and $56.9 million higher than the 2017 forecast. The increase in revenue is due to the proposed fare increase, additional advertising revenue, and a new ride-hailing fee imposed by the City of Chicago, estimated to provide $16.0 million in new revenue in 2018. The City will provide CTA with this additional revenue from the Ground Transportation Tax (GTT) to fund capital improvements. Fare and pass revenue in 2018 is projected to be $1.9 million higher than the 2017 budget and $22.7 million higher than the 2017 forecast, due to additional revenue from the fare increase.

The budget for public funding revenue is impacted by a significant reduction by the State of Illinois starting this summer. The State budget that passed in July 2017 imposed a 2 percent surcharge on sales tax receipts to RTA, reducing CTA funding by approximately $9.0 million for 2018. Nearly 20 percent of the CTA's budget comes from the State Public Transportation Fund (PTF), which was cut by 10 percent for SFY2018. This reduction is approximately a $24.0 million impact to the CTA budget. Both the sales tax and PTF are continuing appropriations of the State. The reduced fare subsidy, representing 2 percent of the budget, is the only state revenue source subject to annual appropriation. This subsidy has been reduced from $28 million to $14 million for the last three years. CTA and RTA agencies will continue to make a case for full reimbursement at historic levels. Combined, CTA's 2018 public funding will decline by nearly $31.0 million from the 2017 budget and increase by $7.9 million from the 2017 forecast.

Any reduction in State funding negatively impacts the Authority. Due to uncertainty regarding revenue trends, controls on labor, material and other expenses are tightened, with aggressive management of hiring continuing into 2018. CTA also plans to maximize non-farebox revenue opportunities, including innovative advertising.

Service & Fares

The President's 2018 proposed budget preserves overall service levels. CTA will continue to focus on providing bus and rail service that is critical to Chicago's growing economy.

The President's 2018 proposed budget recommends a modest fare increase to assist in closing a budget gap of $33 million created by reduced public funding from the State of Illinois. Under the proposal, CTA base fares will increase by $0.25 for full fare bus, bus cash, and rail rides. This increase is a first in nine

years for the agency. Reduced fares will continue to be at or near 50 percent of full fares increasing $0.10 for bus and bus cash rides and $0.15 for rail rides.

This proposal is mindful of the cost burden on our frequent riders. The 30-Day Full Fare Pass price will increase by $5, but all other pass prices will remain the same. By keeping other pass prices flat, the CTA will provide pay-per-use customers with more affordable fare options. All other fares and special fares such as the student fare of $0.75, O'Hare Blue Line Station fare of $5.00 and Single Ride Ticket cost of $3.00 will remain unchanged. Moreover, this fare increase ensures that CTA remains the most affordable travel option in Chicago and keeps CTA fares below inflation and more affordable than some peer agencies.

This proposal is anticipated to generate $23.0 million in additional fare revenue in 2018.

All proposed fare changes are shown in the following table.

Proposed Fare Structure For All Routes

Fare Group	**Current Fare Structure (Effective January 14, 2013)**	**Proposed Fare Structure (Effective January 7, 2018)**
CTA Regular Fare Types		
Full Fare Bus [1]	$2.00	$2.25
Full Fare Rail [1]	$2.25	$2.50
Full Fare Cash (Bus Only)/PAYG [2]	$2.25	$2.50
Transfer [3]	$0.25 (1st), free (2nd)	Unchanged
Ventra Single Ride Ticket [4]	$3.00	Unchanged
1-Day/24-Hour Pass	$10.00	Unchanged
3-Day/72-Hour Pass	$20.00	Unchanged
7-Day Pass	$28.00	Unchanged
7-Day Pass (CTA/Pace)	$33.00	Unchanged
30-Day Pass (CTA/Pace)	$100.00	$105.00
Metra Link-Up	$55.00	Unchanged
CTA Reduced Fare Types [5]		
Reduced Fare Bus	$1.00	$1.10
Reduced Fare Rail	$1.10	$1.25
Reduced Fare Cash (Bus Only)	$1.10	$1.25
Transfer [3]	$0.15 (1st), free (2nd)	Unchanged
30-Day Reduced Pass	$50	Unchanged
CTA Student Fare [6]		
Bus & Rail on Student Card	$0.75	Unchanged
Transfer [3]	$0.15 (1st), free (2nd)	Unchanged
Student Fare Cash (Bus Only)	$0.75	Unchanged
O'Hare Station Fare [7]		
Full Fare on Ventra cards, Ventra Tickets, Cash or PAYG	$5.00	Unchanged

Stadium Express Bus		
#128 Soldier Field Express [8]	$5.00 round-trip $2.50 reduced fare	Unchanged

Fare Table Notes

[1] Indicates fares paid with Ventra Card or registered contactless credit/debit cards, unless otherwise indicated.

[2] "PAYG" refers to payments made by a contactless credit card or mobile wallet not associated with a Transit Account (unregistered).

[3] Transfers are not available with cash or PAYG transactions.

[4] Single Ride Ticket Fare includes transfer for bus and rail.

[5] The CTA offers reduced fares via a RTA reduced-fare permit to seniors and persons with disabilities in compliance with 49 CFR Part 609. In addition, the CTA also offers reduced fares to children age 7-11. Free rides are offered to low-income seniors and persons with disabilities as required by 70 ILCS 3605/51(b) & 70 ILCS 3605/52. Children under the age of 7 are free at all times when riding with an adult.

[6] Student Fares are for enrolled elementary and high school students on school days only, 5:30 a.m. to 8:30 p.m. Students can pay with transit value on their Student Ventra Card, or present the Card on bus to be eligible for reduced cash fare.

[7] Special $5 pricing at O'Hare station is not applicable to the following customers: Ventra Cards using a purchased period-pass; contactless credit/debit cards using a purchased period-pass; O'Hare Airport-based employees using an employer-issued Ventra Card; reduced fares; student fares; and U-Pass.

[8] The #128 Soldier Field Express is a service jointly managed by CTA and Metra, scheduled to operate for all Chicago Bears home games at Soldier Field, and other agreed-upon events. Period-passes, Student Fares and U-Pass fares are not accepted on the #128. Reduced fares are for customers displaying the RTA reduced-fare permit and children ages 7 to 11. Statutory free rides (seniors and persons with disabilities) and children under the age of 7 are free on the #128.

Operating Expenses

The proposed operating budget is $1,514.5 million, a $9.7 million decrease compared to the 2017 budget, and a $47.3 million increase compared to the 2017 forecast. Although cost-cutting measures were put in place in fiscal year 2017 and will continue into 2018, CTA's 2018 budget includes increased material, fuel, power and security costs as outlined below.

[Graph: Pie Chart of 2018 Operating Expense Budget in $ Millions]

Expense Category	$ in Millions	Percentage

Labor	$1,046	69%
Material	$92.4	6%
Fuel	$33.6	2%
Power	$31.4	2%
Provision for Injuries and Damages	$5.0	1%
Purchase of Security Services	$17.8	1%
Other Expenses	$288.3	19%

Labor expenses represent 69.1 percent of the total operating expense budget at $1,046.1 million, a decrease of $4.4 million from the 2017 labor budget and an increase of $7.7 million from the 2017 forecast. The labor budget assumes flat service levels, an increase in pension costs but a decrease in support staff expenses due to the elimination of 45 non-union positions and restricting hiring on an additional 70 positons.

Positions

	2017 Budgeted Positions	2018 Budgeted Positions
Total CTA without STO*	4,345	4,300
Bus STO positions**	3,775	3,796
Rail STO positions**	1,819	1,801
Total CTA	**9,939**	**9,897**

*Total excludes Capital positions
**Scheduled Transit Operations (STO) Full-Time Equivalents

Material expenses represent 6.1 percent of the budget, at $92.4 million. This is $3.2 million higher than the 2017 budget and $4.9 million higher than the 2017 forecast. CTA's cost for maintaining the rail fleet is expected to increase due to the 5000-series rail cars coming out of warranty and the increased costs to maintain the oldest rail cars, the 2600-series. The 2600-series cars were built in the early to mid-1980's and due to their age, require replacement of major components, such as motors, to remain in service. The 2600-series rail cars will be replaced by the 7000-series trains when they begin delivery in 2020.

For 2018, diesel fuel expenditures are budgeted to be $33.6 million, which is $0.4 million lower than the 2017 budget and $4.6 million higher than the 2017 forecast. The 2018 diesel fuel budget assumes flat consumption and incorporates anticipated higher pricing than 2017. Throughout 2018, CTA will continue to manage the diesel fuel budget using a fixed-price purchasing policy. To mitigate future price increases, CTA has fixed pricing for over 70 percent of the 2018 forecasted fuel needs.

For 2018, traction power expenditures are budgeted to be $31.4 million, which is flat compared to the 2017 budget and $3.3 million higher than the 2017 forecast. The 2018 budget reflects a significant increase in capacity costs – a regulatory charge incurred by electricity suppliers and passed on to all ComEd customers. Additionally, the 2018 forecasted traction power consumption is 8.0 percent higher than the 2017 forecast in anticipation of more typical weather conditions for the year, versus the mild weather in 2017. However, these cost increases are offset by an Illinois Commerce Commission order that was favorable to CTA in an electric rate-setting process that occurs every three years. Also, CTA implemented the "load following" purchase strategy in 2017. "Load following" means the price is fixed

for a certain percentage of consumption, no matter how much electricity is used. This mitigates the risk of exceeding the budget, even if consumption is much higher than anticipated. At the time of budgeting, CTA had already fixed prices for 80 percent of its expected 2018 traction power usage.

The budget includes a $5.0 million contribution to the provision for injuries and damages fund in 2018. Recommended levels are determined by the CTA's actuaries based on actual claims history and future projections. It has been determined that the current value of the reserve fund is sufficient.
Purchase of security services is budgeted at $17.8 million, an increase of slightly under $1.0 million versus the 2017 budget, and $0.5 million higher than the 2017 forecast. The increase is due to normal cost escalation for contracted security services. The purchased security services budget covers inter-governmental agreements with the police departments of Chicago, Oak Park, Forest Park and Evanston, plus some contract security services for the protection of bus garages and other CTA facilities.

Other expenses are budgeted to be $288.3 million in 2018, a decrease of $4.7 million compared to the 2017 budget, and an increase of $24.5 million compared to the 2017 forecast. Included in the other expenses category is the CTA's pension obligation bond debt, contractual and maintenance services, utilities, insurance, debt service and other miscellaneous expenses. The CTA's utility expenses are reduced due to a renegotiated telephone contract that saves $750,000 in 2018.

Operating Revenues

The CTA has two main revenue categories: system-generated revenues and public funding.

System-Generated Revenues

System-generated revenues include fares and passes, reduced-fare subsidy, advertising and concessions, investment income, statutory required contributions from Chicago and Cook County, and other miscellaneous revenues, including City of Chicago's new ride-hailing fee. In 2018, system-generated revenue is budgeted to be $707.6 million, representing an increase of $21.2 million when compared to the 2017 budget and an increase of $56.9 million versus the 2017 forecast.

[Graph: Pie Chart of 2018 System-Generated Revenue Budget in $ Millions]

Revenue Category	$ in Millions	Percentage
Fare and Passes	$583.1	82%
Reduced Fare Subsidy	$28.3	4%
Advertising, Charter & Concessions	$38.3	5%
Investment Income	$1.6	0%
Statutory Required Contributions	$5.0	1%
Other Revenue	$51.2	7%

Revenue from fares and passes is budgeted at $583.1 million, which is $1.9 million higher than the 2017 budget and $22.7 million higher than the 2017 forecast. The increase is anticipated due to a proposed base fare increase of $0.25 and a 30-Day Pass increase of $5.00. In accordance with state and local laws, the CTA continues to provide free rides to seniors and people with disabilities participating in the state's Circuit Breaker Program, active military personnel, and veterans with disabilities.

The CTA provides approximately 95 million reduced and free-fare trips annually to qualified riders based on federal, state, or local mandates. The foregone revenue from these rides is in excess of $100 million. The state provides partial support for this mandate, with the reduced-fare subsidy. The subsidy is a

reimbursement provided to local transit agencies by the Illinois General Assembly. The 2017 subsidy was reduced by nearly 50 percent. Consistent with guidance from the RTA, the 2018 proposed budget assumes the reduced fare subsidy will return to historic levels, resulting in $28.3 million for 2018.

Advertising, charters and concessions revenues include advertisements on buses, trains and stations, income from concessions, and other non-farebox revenue. The 2018 budget is $38.3 million, which is approximately $3.2 million higher than the 2017 budget and $3.1 million higher than the 2017 forecast due to an increase in minimum guarantees in advertising contracts, and management initiatives to increase digital advertising. The CTA will continue to work to expand digital advertising and increase advertising sales.

Investment income for 2018 is budgeted at $1.6 million, $0.5 million higher than the 2017 budget and $0.5 million lower than 2017 forecast. Interest rates hovering near zero percent plus the State of Illinois' continued late payment of public transportation funds mean CTA's conservative cash investments will yield minimal income.

Statutory required contributions remain unchanged in 2018, budgeted at $5.0 million. The Regional Transportation Authority Act requires the City of Chicago to contribute $3.0 million and Cook County to contribute $2.0 million each year toward CTA operations. These required cash contributions are in addition to in-kind contributions from the City of Chicago. The Chicago Police Department's Public Transportation Section provides approximately $22.0 million of in-kind security services to the CTA as part of its regular patrols. Meanwhile Cook County provides in-kind services through the Sheriff's Work Alternative Program (SWAP). Under the SWAP program, non-violent offenders in Cook County supplement existing CTA employees to clean bus turnarounds and garages.

All other revenue includes non-capital grants, park and ride revenue, rental revenue, third-party contractor reimbursements, and filming fees, among other varied income sources. Other revenues are budgeted in 2018 at $51.2 million, an increase of $15.7 million compared to 2017 budget and $17.9 million compared to the 2017 forecast. The increase is primarily due to a new revenue source for the 2018 Budget from the ride-hailing fee that will be collected by the City of Chicago. The new revenue source is expected to generate $16.0 million for CTA in 2018 and will be dedicated for capital improvements to the track infrastructure that will improve rail commute times and also enhancements related to safety and security.

Public Funding

[Graph: Pie Chart of 2018 Public Funding Budget in $ Millions]

Funding Category	$ in Millions	Percentage
Sales Tax I	$381.2	47%
Sales Tax II	$59.6	8%
PTF II	$65.2	8%
RETT	$66.6	8%
PTF II on RETT	$16.7	2%
Non-Statutory Funding (Sales Tax I, PTF I, and Other)	$211.6	26%
Innovation, Coordination, and Enhancement Funding	$6.0	1%

The forecasted amount of public funding available for CTA operations are established by the RTA, and are based on the RTA's revenue projection for the year and the approved funding marks of the RTA Board. Public funding has three sources: sales tax revenue, public transportation funds (PTF), and the real estate

transfer tax (RETT). The three funding sources are authorized under state statutes passed in 1983 and 2008. A diagram of public funding received by RTA and the way in which it is allocated among the three Service Boards is included in the Operating Funding Summary in the appendices.

The RTA retains 15 percent of the sales tax collections authorized in 1983, leaving 85 cents of every dollar to flow directly to the service boards via the formula established by the state legislature. Of these remaining funds, the CTA receives 100 percent of the taxes collected in Chicago and 30 percent of taxes collected in suburban Cook County. Of the funding available from the 0.25 percent sales tax and PTF authorized by the 2008 legislation, the CTA receives 48 percent of the remaining balance after allocations are made to fund various programs. Additionally, the 2008 legislation authorized a $1.50 per $500 increase in RETT, all of which is collected in Chicago. The CTA receives 100 percent of the increased RETT authorized in 2008 and a 25 percent state PTF match on the RETT.

The State of Illinois passed its 2018 budget that reduced PTF match by 10 percent for one year. The budget also included a two percent permanent surcharge on sales tax receipts. In 2018, these changes will impact CTA funding by approximately $33 million.

Public funding available through the RTA is budgeted to be $806.9 million in 2018. This includes the $6.0 million Innovation, Coordination and Enhancement (ICE) funds which are distributed to the service boards by formula via the RTA, and can be used in the operating or capital budget. The total public funding level is a $31.0 million decrease compared to the 2017 budget and a $7.9 million increase over the 2017 forecast. The public funding available for the CTA for 2018 is impacted by the State of Illinois 2018 Budget.

Ridership

CTA ridership was at a 20-year high in 2012, but has declined at a rate of 2.3 percent per year over the last three years. Rail ridership has averaged losses of 1.0 percent over this time after growing seven of the previous eight years. Over the last ten years, rail ridership is up 22 percent. Bus ridership has fallen five straight years, averaging a decrease of 3.4 percent during the last three years.

CTA ridership trends are consistent with national trends. The first half of 2017 saw bus ridership in the largest metro areas down 4.7 percent, and rail ridership down 1.9 percent. San Francisco, Washington DC, Cleveland and Philadelphia each saw rail ridership fall by more than 4.0 percent. New York City has seen rail ridership fall by more than 1.0 percent.

Ridership in Chicago has been negatively impacted by increasing competition from the ride-hailing app industry, including Uber, Lyft and Via. Continued low gas prices and slowing bus speeds have added to the negative trends. The popularity of ride-hailing apps continues to grow and gas prices are forecasted to remain low in 2018.

Considering recent ridership trends, the forecasts of continued low gas prices, and increased competition, CTA expects to see ridership decline next year. The proposed fare increase will also negatively impact ridership. As a result, CTA estimates that system-wide ridership will decrease to 462.1 million in 2018, 3.7 percent below the 480.1 million rides forecasted for 2017. Bus ridership is expected to fall 4.7 percent to 237.2 million in 2018, while rail ridership is expected to fall 2.7 percent to 224.9 million.

2019-2020 Two-Year Financial Plan

Budget Highlights

The two-year financial plan continues the Authority's mission to deliver quality, affordable bus and rail transit services. The financial plan assumes flat bus and rail service levels from the 2018 budget, increases in non-farebox revenues through innovative advertising programs, and continued unprecedented investments in bus and rail fleets, stations, track structures and technology.

The two-year financial plan assumes public funding as reported by the RTA. The public funding marks for 2019 and 2020 assume full restoration of the reduced-fare subsidy at $28.3 million each year by the State of Illinois. The two-year financial plan also assumes restoration of the State Public Transportation Fund (PTF) that was reduced by 10 percent for the FY2018 State of Illinois Budget. Any additional reduction in State funding to the CTA would negatively impact the two-year plan.

The two-year financial plan shows increased system-generated revenue from fares and passes, advertising, and the new City of Chicago ride-hailing fee, offset by increased debt service, and standard increases in contractual services and contributions to injuries and damages reserves.

The collective bargaining agreement (CBA) that applies to the majority of CTA employees expired at the end of 2015. At the time of the CTA budget development, there was no executed agreement in place. The labor cost growth is budgeted at 2.0 percent growth for the 2019-2020 plan years but will be determined, in large part, by the outcome of collective bargaining negotiations and continued efficiency gains.

The CTA has built and is continuing to strengthen its management team, policies and procedures, and internal controls to ensure attainment of operational efficiencies throughout the agency. The plan reflects fixed fuel purchases, managed block purchases of power, and strong efforts to monitor expenses and increase recurring revenue streams.

Operating Expenses

Total operating expenses are budgeted at $1,514.5 million for the 2018 budget. Operating expenses are expected to grow by 4.1 percent to $1,576.4 million in 2019 and 2.4 percent to $1,613.5 million in 2020.

Labor expenses, including base salaries, benefits, and payroll taxes, are projected to be $1,046.1 million in 2018, $1,067.0 million in 2019 and $1,088.3 million in 2020. Labor for the two-year plan reflects a 2.0 percent increase year over year, for both 2019 and 2020, respectively. The increase in labor costs are based on expected increases in the cost of CTA benefits, including pension and healthcare.
The financial plan projects material expenses to be $92.4 million in 2018, $96.6 million in 2019 and $97.1 million in 2020. The materials projection assumes additional costs to maintain the rail fleet, including the 2600-Series rail cars, which have been in service since the 1980s.

The proposed financial plan projects fuel costs to be $33.6 million in 2018, $34.6 million in 2019 and $35.6 million in 2020. The plan assumes the continuation of CTA's strategic fixed-price purchasing policy, with conservative growth estimates year over year. The CTA assumes that projected fuel consumption will remain essentially flat and that fuel cost per gallon will increase slightly.

The plan projects rail electric power costs to be $31.4 million in 2018, $32.6 million in 2019 and $33.9 million in 2020. CTA has already locked in pricing for 100 percent of the expected 2019 traction power consumption, taking advantage of attractive forward prices and providing budget certainty. Although

2020 is beyond the base term of CTA's current electricity supply contract, CTA expects to make further advanced purchases once a contract is in place for that year. As in previous years, both capacity costs and Future Energy Jobs Act (FEJA) costs are expected to continue rising through 2020.

CTA plans to continue contributions to provision for injuries and damages, with a $5.0 million reserve payment planned for 2018. The financial plan projects the reserve payment to increase to $10.0 million in 2019 and $10.0 million 2020. The amount of actual deposits to the fund may be adjusted based on the annual actuarial valuation of the fund's liabilities. The amount needed to fund this reserve is based on actual experience, the projected future balance in the reserve, and the liabilities projected for the following year.

Purchase of security services is projected to be $17.8 million in 2018, $18.2 million in 2019 and $18.5 million in 2020. The annual growth rate is projected at 2.0 percent for 2019 and 2020, respectively, due to annual contractual increases built into the contracts with private security firms and police departments. The CTA has intergovernmental agreements with the Chicago, Oak Park, Evanston and Forest Park police departments to provide security services for the CTA rail system.

Other expenses include utilities, advertising, equipment, software maintenance, accounting, engineering, legal fees, banking fees and commissions, debt service for sales tax revenue bonds including the outstanding pension obligation bonds, and other consulting services. Other expenses are budgeted to be $288.3 million in 2018. The financial plan projects other expenses at $317.4 million in 2019 and slightly over $330.1 million in 2020.

Operating Revenues

Overall operating revenues, including system-generated revenues and public funding, are projected to increase over the two-year financial plan. From the 2018 budgeted level of $1,514.5 million, operating revenues are projected to increase by 4.1 percent in 2019 to $1,576.4 million and 2.4 percent in 2020 to $1,613.5 million.

System-Generated Revenues

From a base of $583.1 million in 2018, fare and passes revenue is projected to increase to $586.0 million in 2019 and $591.0 million in 2020. These 0.5 percent and 0.8 percent year-over-year increases are based on stabilization of ridership levels as the city's transit-oriented population and employment continue to grow. Management initiatives to increase transit benefit participation will also contribute to fare revenue increases in 2019 and 2020.

The two-year plan assumes the reduced-fare subsidy will be continued by the State when the fiscal year budget is passed. The plan projects funding will be $28.3 million each year in 2019 and 2020. This reduced-fare subsidy only covers a portion of the estimated $100 million in actual free and reduced rides provided by the CTA.

The two-year financial plan projects revenue from advertising, charters, and concessions to grow at 2.0 percent in 2019 and 8.4 percent in 2020. This yields a projected $39.1 million in 2019 and $42.4 million in 2020. Advertising revenue continues at a strong pace, with increased digital advertising and growth of concession revenue, as well as revenue from new initiatives in 2020.

Investment income in 2019 and 2020 is projected to remain flat with 2018 levels at $1.6 million for each year.

Statutory required contribution revenues are forecast to continue to be $5.0 million per year. The Regional Transportation Authority Act requires that the City of Chicago contribute $3.0 million annually and that Cook County contribute $2.0 million annually to CTA operations.

Other revenue is expected to grow by 24.3 percent in 2019 and 7.0 percent in 2020 due to CTA's continued efforts to increase non-farebox revenues. The new $0.15 per trip ride-hailing fee proposed by the City of Chicago in its 2018 budget is anticipated to generate $16.0 million for CTA in 2018. The per-trip fee increases by $0.05 per trip to $0.20 in 2019. This fee is the first in the nation to be dedicated solely for mass transit capital improvements.

The plan also projects increased miscellaneous revenues, slight growth in rental properties and park-and-ride revenues, third-party contractor reimbursements, fees from filming, non-capital grants from the federal government and other sources. The planned totals are $63.6 and $68.1 million in 2019 and 2020, respectively.

Public Funding

The RTA provides public funding marks for the two-year financial plan. The RTA public funding projections include revenues from sales tax collections, and PTF and RETT revenue from the City of Chicago. The RTA public funding marks for CTA increase by 5.7 percent in 2019 and 2.9 percent in 2020.

The recovery ratio measures the percentage of expenses that a Service Board must pay against the revenue that it generates. System-generated revenues, operating expenses, and certain statutory exclusions are used in the calculation. The RTA Act requires the region to fund 50 percent of its expenses through revenues generated by the three Service Boards: the CTA, Metra, and Pace. The estimated recovery ratios for the CTA in 2019 and 2020 are 55.76 and 55.23 percent, respectively – meeting the regional requirement.

Five-Year Capital Improvement Program

"Every Chicagoan deserves access to safe, reliable transit. Major innovations are taking place in the public passenger vehicle and transportation network provider industries, and the City of Chicago recognizes the hard work of industry, advocates and aldermen to make this a reality." Mayor Rahm Emanuel, May 8, 2017

The most vital cities in the world provide their communities with leading-edge technology that engages, informs, and empowers their citizens. Mayor Emanuel's approach for achieving this vision is built on a commitment to modern infrastructure, smart communities, and technological innovation.

Chicago Transit Authority's (CTA) Fiscal Year (FY) 2018-2022 $2.7 billion Capital Improvement Plan (CIP) pursues this vision by funding capital projects to modernize and improve CTA's transit system, with an emphasis on technology and innovation.

Funding for this plan anticipates a multi-year commitment from multiple federal backed sources, including traditional federal formula, Major Capital Investment Core Capacity, and anticipated competitive grants. At this time, the plan calls for two locally backed sources, the larger amount from an anticipated CTA Bond issue and a smaller amount from an expected RTA Bond issue in FY 2020.

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act into law. The FAST Act is the first long-term federal surface transportation authorization enacted in more than a decade. By authorizing $305 billion over a five-year period for federal fiscal years (FFY) 2016-2020 for highways, highway and motor vehicle safety, public transportation and other programs, this law provides multiyear funding certainty that allows CTA to plan and implement major capital projects. The FAST Act includes modest annual funding increases over the levels included in the previous transportation authorization called Moving Ahead for Progress in the 21st Century (MAP-21). MAP-21 authorized funding for FY 2013 and 2014, and was extended on a short-term basis numerous times until the FAST Act was enacted.

In 2018, the City of Chicago will implement an increase in Ground Transportation Tax (GTT) on ride-hailing services where this portion of the annual tax proceeds are to fund capital improvements to the City of Chicago transportation network and specifically to the CTA transit network. The CTA will leverage this source of funds to maximize capital investment in the system by using tax proceeds to support a bond issuance that will fund $179 million of capital investments.

Meanwhile, the State of Illinois has not had a funded Public Transportation Bond program since 2014 and has proposed to reduce CTA's share of the most recent program by up to $275 million. Since 2014, the CTA has had to rely on internally generated sources of funds to match CTA's major federal capital investments. While these CTA-sourced funds enable the CTA to go forward with a number of key major capital investments such as the procurement of new rail cars, rehabilitation of the O'Hare Blue Line, and the Red and Purple Modernization Phase One project, internally generated sources of funding become increasingly limited with each passing year. Without a new State Capital Transportation program, some planned projects have had to be deferred. This will continue, and newly planned projects will also be at risk of delay.

Despite the challenge of delayed funding, this CIP maintains its aggressive plan to improve the nation's second-largest transit system, which provides 1.5 million rides on an average weekday. CTA's capital program for FY 2018-2022 includes funding that will provide safe, convenient and affordable transportation options that enhance the quality of life for everyone in the Chicago metropolitan region.

CTA believes the region's transit riders should have access to a world-class public transportation system, recognizing that public transportation is critical to increasing economic opportunity throughout the city and region.

CTA will strive to continue providing high-quality transit service. Service improvements contained within this five-year CIP include new technologies, new transit stations and new public artwork at terminals and stations, which will enhance the customer experience and improve safety. CTA is committed to moving people around the city of Chicago and its neighboring communities efficiently – getting them to and from their destinations safely and on time.

This CIP continues to advance the CTA system toward a state of good repair (SOGR). The investments outlined in the CIP will reduce operating costs in some areas and avoid escalating costs in others. By driving down expenses and minimizing costs, CTA will be able to leverage its limited operating and capital funds to continue to further improve the transit system.

[Photo: Mosaic of Pictures showing different aspects of the CTA; work being done on the Ravenswood connector, artist rendering of modernized 95th Street Red Line rail terminal, Wilson rail station, Electric Bus, Ventra App, persons using cell phones in subway, CTA Art at Thorndale, 35th Street and 47th stations on the Red Line and Cermak-McCormick on Green line.

Sources of Funds

[Graph: 2018-2022 CIP Preliminary Marks Capital Improvement Funding Sources. $ in thousands]

The total projected available funding is $2.7 billion for the FY 2018-2022 CIP. A summary of this funding is presented in the following chart:

FY 2018-2022		
Sources of Funds	**5 Yr. Total (in $ thousands)**	**Percentage of Total**
5307 Urbanized Formula	$657,115	24.32%
5339 Bus and Bus Facilities Formula	$61,296	2.27%
5337 State of Good Repair	$779,015	28.83%
Sec. 5307 CMAQ	$133,891	4.96%
5309 Core Capacity	$500,000	18.51%
Department Homeland Security (DHS)	$22,221	0.82%
RTA Bonds	$79,000	2.92%
5310 Enhanced Mobility	$380	0.01%
Invest in Cook Program	$235	0.01%
CTA Bond - Ground Transportation Tax	$179,000	6.63%
CTA Bus Proceeds	$1,875	0.07%
CTA Bond RPM	$287,249	10.63%
CTA Share for Competitive Grants	$485	0.02%
New Funding Available	**$2,701,762**	**100%**

The following table details the funding sources supporting the CTA Capital Improvement Program:

FY 2018- 2022 CIP Preliminary Marks ($ in thousands)

Sources of Funds	2018	2019	2020	2021	2022	TOTAL
5307 Urbanized Formula	$128,531	$129,961	$131,407	$132,869	$134,347	$657,115
5337 State of Good Repair	152,672	154,222	155,787	157,368	158,966	779,015
5339 Bus and Bus Facilities Formula	11,639	11,941	12,251	12,569	12,895	61,296
Subtotal FTA	**$292,842**	**$296,124**	**$299,445**	**$302,806**	**$306,208**	**$1,497,425**
Sec. 5307 CMAQ	$25,000	$8,891	$100,000	$0	$0	$133,891
5309 Core Capacity	100,000	100,000	100,000	100,000	100,000	500,000
Transit Security Grant Program (DHS)	10,221	3,000	3,000	3,000	3,000	22,221
Other Federal	**$135,221**	**$111,891**	**$203,000**	**$103,000**	**$103,000**	**$ 656,112**
AVAILABLE FEDERAL	**$428,063**	**$408,014**	**$502,445**	**$405,806**	**$409,208**	**$2,153,537**
RTA Bonds	$0	$0	$79,000	$0	$0	$79,000
5310 Enhanced Mobility for Seniors and Individuals with Disabilities Program of Projects	380	0	0	0	0	380
Invest in Cook Program	235	0	0	0	0	235
CTA Bond - Ground Transportation Tax	179,000	0	0	0	0	179,000
CTA - Bus Proceeds	1,875	0	0	0	0	1,875
CTA Bond for Red and Purple Modernization	287,249	0	0	0	0	287,249
Subtotal Local	**$468,740**	**$0**	**$79,000**	**$0**	**$0**	**$547,740**
AVAILABLE LOCAL	**$468,740**	**$0**	**$79,000**	**$0**	**$0**	**$547,740**
New Funding Available	**$896,802**	**$408,014**	**$581,445**	**$405,806**	**$409,208**	**$2,701,276**
CTA Operating Match	485	0	0	0	0	485
TOTAL Programmed Funds	**$897,287**	**$408,014**	**$581,445**	**$405,806**	**$409,208**	**$2,701,762**

Federal funding of $2.2 billion is anticipated from a combination of Formula and Discretionary based programs. Other contributing sources include CTA issued bonds of $466.2 million and RTA issued bonds of $79.0 million.

Sources of Funds with Legislative Update

Federal Funding – The current five year transit authorization known as Fixing America's Surface Transportation (FAST) Act provides five years of predictable funding that enables transit agencies to better manage long-term assets and address the backlog of state of good repair needs. It also includes

funding for new competitive grant programs for buses and bus facilities, innovative transportation coordination, workforce training, and public transportation research activities.

The FAST Act authorizes funding for FY 2016 through FY 2020 for transit agencies totaling $61.1 billion nationally of which the majority of funds ($48.9 billion) is allocated to agencies based on formulas created by Congress that are derived from transit and population metrics, while the remaining ($12.2 billion) is distributed by discretionary action by Congress and are to provide for federal transit capital construction programs.

The FAST Act continues many of the important programs and streamlining efforts enacted under the prior authorization, MAP-21. MAP-21 took important steps to simplify and consolidate federal highway and transit programs, establish a greater focus on asset management and preservation, and articulate principles of goal-setting and performance measurement in the development and implementation of federal surface transportation programs. Together, these laws place emphasis on performance management and the establishment of the new and consolidated performance programs. MAP-21 required states and metropolitan planning organizations to set targets for transit condition and performance, and it also directed the FTA to undertake a rule-making process to establish measures for determining whether the targets have been met.

Federal Transit Funding Process as Defined by the FAST ACT – Transit agencies receive funds under the provisions of the Federal FAST Act. Each year Congress appropriates funds for transit programs based on the FAST Act, allowing the Federal Transit Administration (FTA) to distribute both formula and discretionary funds to transit agencies throughout the nation.

CTA traditionally receives FTA formula funds under three funding programs: 5307, 5337 and 5339. The 5307 Urbanized Area program provides funding for public transportation capital and planning projects; 5337 are State of Good Repair funds dedicated to repairing and upgrading rail transit systems along with bus rapid transit systems; and 5339 Bus & Bus Facility funds are used to repair, rehabilitate and purchase buses and related equipment and to improve bus facilities.

The amount of funds that an urbanized area (UZA) receives is based on a formula that includes population and the amount of transit service provided. Chicago is part of the Chicago/NW Indiana UZA. The Regional Transportation Authority (RTA), as the designated recipient, distributes the Chicago region's share to each of the three transit agencies on the following basis: CTA (58%), Metra (34%) and Pace (8%). Each agency submits grant applications annually for the projects to be funded. CTA also receives discretionary funds that are administered through a competitive grant program for specific projects.

[Flowchart: describes the Federal Transit Funding process based on the Fixing America's Surface Transportation (FAST) Act.
At top of chart is the Appropriations Act of 2017. The act provided $12.1 billion dollars in funding.
There are two branches that flow from the Appropriations Act; Discretionary which is valued at $2.4 billion and Mass Transit valued at $9.7 billion.
Discretionary funds are awarded competitively on a project basis
Mass Transit funds are assigned based on the program attributes. There are three program types, each with specific attributes. Program 5307 attributes: Urbanized Area, Population Density, Population, Passenger Miles, Vehicle Miles, and Discretional Route. Program 5337 attributes: Funds Heavy Rail Systems, Revenue Miles, and Route Miles. Program 5339 attributes: Urbanized Area, Population Density, and Passenger Miles.
The Mass Transit dollars are split between Chicago and NW Indiana UZA.

The Chicago/RTA portion is then divided between Metra (34%), PACE (8%), and the CTA (58%).]

State Funding – The traditional avenue for the state transit funding is through a legislatively mandated bond program, generally for a five-year period. The most recent State Transportation Series "B" Bond funds were appropriated under two legislative programs: Illinois Jump Start, which was appropriated in FY 2009 and has been authorized in part, and Illinois Jobs Now, which was appropriated and authorized in FY 2010. CTA's share from both legislative programs totals $1.4 billion. The Illinois Jobs Now program included funding for mass transit agencies to replace, upgrade and enhance infrastructure systemwide and provided state funding over a five-year period, which began in FY 2010 and ended in FY 2014. CTA was granted $1.17 billion of funds in total from these programs.

With completion of these programs, the State has indicated that due to budget constraints the remaining $220.9 million of authorized funds will not be appropriated to the CTA. This has resulted in delaying a number of construction projects until a new state transportation program is enacted. In 2017, the State also indicated the need to reduce grant funding for existing projects; grant reductions are expected to result in the delay or downsizing of additional projects.

CTA, over the last several years, provided its own source of funding by issuing bonds, allowing for key projects to advance. It is not feasible to expect the CTA to continue to generate internally financed sources. It is greatly anticipated and desired that the State of Illinois proceed with a new state transportation funding program, so that the CTA can effectively move forward with various new project initiatives as well as in addressing system SOGR needs.

Traditionally with each new five-year federal transit authorization, the region's Service Boards (CTA, Metra, and Pace) have planned for projects that leverage the federal program funds with a state contributed match. Since 2014, State funds have not been available to contribute to the recent federal transit program funding.

Regional Transportation Authority Bonds Funding – RTA is proposing a bond issuance in 2020, and proceeds of $158 million will be made available for the three Service Boards to program for projects. In FY 2020 CTA's share of bond proceeds will total $79 million. This ongoing RTA funding program has provided bond proceeds in 2014, 2015 and currently has a 2017 issuance pending.

The RTA's capacity to issue bonds for the Service Boards is restricted by statutory requirements on the amount of bonding capacity. Going forward, this severely limits RTA's ability to issue bonds unless the capacity is raised. As bonding capacity is made available from retirement of existing capital debt obligations, RTA's policy is to issue new long term capital debt of which the proceeds are meant to fund capital projects for each of the three Service Boards. Bond funds will be allocated as follows: 50% will go to CTA, 45% to Metra, and 5% to Pace. Funding of the debt service for these bonds will be sourced from non-statutory Sales Tax I revenue.

RTA bonding capacity beyond the current limits would need to be authorized through the State legislature and a new source of funding would be required to meet debt service requirements. Otherwise, without a new source to service debt, funding would be provided from current transit operating funds.

CTA Bonds Overview – Since FY 2004, when CTA issued its first Series of Capital Bonds, these bonds have provided an internally generated source of capital funds for SOGR projects. Project funds totaling over $2.8 billion have been provided from this funding program for critical capital projects. The CTA bond financing program continues to be a strategically important supplement to the federal program.

With a SOGR backlog approaching $13 billion, and given the unpredictable nature of state and local funding, it became incumbent on CTA to obtain a reliable source to fill funding gaps and contribute to federally supported projects in the capital plan. CTA's bond financing program has enabled CTA to advance key projects that have touched all elements of CTA system.

In 2018, CTA will issue capital bonds that are supported by the City of Chicago's Ground Transportation Tax. The issuance is expected to generate $179 million of project funds. A portion of these funds will support renewal and repair work which will focus on enhancements to be made to the CTA system that include the following:

Fast and Reliable Tracks

- Green Line South
- Green & Pink Line West
- Red and Blue Subway
- Brown Line
- Blue Line Congress Branch
- Blue Line O'Hare Branch

Safe and Secure Stations

- Replace/modernize cameras system, install monitors at station kiosks
- Maintain state of the art working camera system
- Replace/upgrade lighting systems
- Enhance customer amenities
- Install camera system at CTA bus turnarounds

Also, CTA expects to issue bonds to generate approximately $287.2 million in capital bond proceeds for the North Main Line Red and Purple Modernization Project (RPM). The actual timing of issuances will be determined by the Red and Purple Modernization Phase One project needs and schedule. Through the issuance of bonds, CTA can advance this critically important project, which otherwise would need to be deferred for years and significantly increase system maintenance costs with continual degradation of assets.

Tax-exempt bond financing offers an efficient and cost effective way to supplement scarce federal funding and accelerate critical projects. By constructing projects on an expedited schedule, CTA can reduce costs, improve service, and better promote ridership on the system. These benefits outweigh the future bond financing costs, particularly in the current historically low interest rate environment. CTA's customers will experience the benefits of capital investment through improved safety, service quality, speed, accessibility and reliability throughout the entire system.

Uses of Funds by Asset Category

Projects are funded under the seven asset categories in the CTA's proposed FY 2018-2022 capital plan. Rail system projects receive a significantly larger portion of the proposed capital program funding than bus projects, due primarily to the need to maintain an exclusive right-of-way for rail, while buses operate on streets maintained by other units of government. The capital projects proposed for FY 2018-2022 and beyond are intended to address CTA's most critical needs for the bus and rail system, customer facilities, and systemwide support. CTA's major projects planned or underway during this period include: the Red and Purple Modernization (RPM) Phase One, the O'Hare Blue Line improvements, Rail Yards Improvements, Project Engineering for the proposed Red Line Extension, the purchase of up to 846 new

rail cars, and the overhaul of up to approximately half of the existing rail fleet and over a quarter of the bus fleet.

[Graph: Pie chart depicting dollar allocation for 2018-2022 by Asset category. $ in thousands]

The following table shows the proposed FY 2018-2022 Capital Improvement Program by general category of asset improved or replaced.

FY 2018-2022		
Asset Category	**Capital Funds (in $ thousands)**	**Percentage of Total**
Rail Line Improvements	$947,447	35%
Systemwide Misc.	$861,617	32%
Rail Rolling Stock	$357,478	13%
Bus Rolling Stock	$153,286	6%
Systemwide Facilities	$141,990	5%
Power & Way Track Structure	$197,945	7%
Power & Way Electrical, Signal, & Communications	$42,000	2%
CIP Total	**$2,701,762**	**100%**

FY 2018-2022 Project Solicitation – As a part of the development of the FY 2018-2022 Capital Improvement Program (CIP) the CTA issued a call for new capital projects. This provided an opportunity to present new capital projects for consideration and to provide more detailed information regarding previously submitted projects, both funded and unfunded. This project solicitation is intended to address the prioritization of capital needs of the CTA for the timespan of the five-year capital improvement. This solicitation process serves two essential functions as follows:

1. It identifies those specific projects that should be considered in developing the next five-year capital program.
2. It helps CTA to identify the immediate universe of capital needs; by describing and justifying CTA's needs over the next five years, CTA is better able to prepare for new transit capital funds as programs become available.

The evaluation criteria include: the impact of a proposed investment on state of good repair, customer and employee safety, reductions to travel time, increased customer comfort and convenience, system security, impact on system reliability, compliance with regulations, and community impact.

The following table lists each category of projects in the proposed program. Descriptions of each project are detailed in the following section:

CHICAGO TRANSIT AUTHORITY
FY 2018-2022 Capital Program *(in thousands)*

Title	2018	FY2019-2022	5Yr. Funding
Bus Projects			
Rolling Stock			
Perform Mid-Life Bus Overhaul	$0	$75,394	$75,394
Perform Bus Maintenance Activities	0	9,500	9,500
Replace Buses	28,254	40,138	68,392
Sub-Total	**$28,254**	**$125,032**	**$153,286**
Rail Projects			
Rail Line Improvements			
Rehabilitate Blue Line - O'Hare Branch	$0	$32,222	$32,222
Red Line Extension - Planning, Preliminary Engineering	2,976	0	2,976
North Main Line - RPM	412,249	500,000	912,249
Sub-Total	**$415,225**	**$532,222**	**$947,447**
Power & Way Electrical, Signal & Communication			
Replace/Upgrade Power Distribution and Signals	33,500	8,500	42,000
Sub-Total	**$33,500**	**$8,500**	**$42,000**
Power & Way, Track & Structure			
Infrastructure Safety & Renewal Program	137,945	60,000	197,945
Sub-Total	**$137,945**	**$60,000**	**$197,945**
Rolling Stock			
Perform Rail Car Overhaul	$18,930	$75,266	$94,196
Perform Rail Car Maintenance Activities	2,500	10,000	12,500
Purchase Rail Cars	28,703	222,079	250,782
Sub-Total	**$50,133**	**$307,345**	**$357,478**
Systemwide Projects			
Miscellaneous			
Information Technology	$1,989	$9,696	$11,685
Equipment and Non-Revenue Vehicles Replacement	1,875	7,100	8,975
Tactile Signage at CTA Bus Stops	475	0	475
Rehabilitate Rail Stations	18,020	16,000	34,020
Rehabilitate Rail Stations - Belmont (Blue) Gateway	2,000	0	2,000
Implement Security & Communication Projects	28,221	12,000	40,221
Program Management	6,690	26,160	32,850
Bond Repayment, Interest Cost, & Finance Cost	143,149	578,725	721,875
Blue Line Traction Power Study	625	0	625
Signal Priority & Modernization (Ashland Ave.)	0	8,891	8,891
Sub-Total	**$203,044**	**$658,572**	**$861,617**
Support Facilities & Equipment			
Improve Facilities - Systemwide	29,187	112,803	141,990
Sub-Total	**$29,187**	**$112,803**	**$141,990**
Capital Project Total	**$897,287**	**$1,804,474**	**$2,701,762**
CTA Operating Match	**-485**	**0**	**-485**
Marks	**896,802**	**1,804,474**	**2,701,276**
Marks/Variance	**0**	**0**	**0**

Bus Projects

Rolling Stock

❖ Perform Mid-Life Bus Overhaul

Purpose: The Bus Overhaul and Upgrade Program is intended to get the full useful life of buses by performing scheduled tasks that will result in decreased equipment downtime and a reduction in unscheduled maintenance. Unscheduled maintenance occurs when buses fail while in service, disrupting operations, inconveniencing customers and increasing operating costs.

[Picture: Worker performing maintenance on a bus.]

Funding/Description of Proposed Work/Major Elements: In FY 2018-2022, funding of $75.4 million is provided for two initiatives: the first is the life extending overhaul of up to 430, *1000-Series* New Flyer Articulated buses, and the second is the overhaul of up to 100 of the *4300/4333-Series* New Flyer Articulated buses. The number of buses to be overhauled is dependent on future procurements of buses. The overhaul program will provide for ongoing bus vehicle overhaul efforts to support removal and installation of components including, but not limited to engines, transmissions, cooling systems, HVAC systems, wheelchair ramps, batteries, suspension systems and doors. The program will also correct defects discovered during inspections.

Budget Impact: The performance of routine bus overhaul and upgrades will minimize increases in operating costs associated with the operation and maintenance of older, outdated and worn-out equipment, and will allow the CTA to provide more reliable service.

❖ Perform Bus Maintenance Activities

Purpose: Funding for this project will provide for an ongoing capital maintenance program that consists of tasks necessary to keep buses in service through systematic inspection, detection, and prevention of incipient failure.

Funding/Description of Proposed Work/ Major Elements: CTA plans to spend $9.5 million in FY 2018-2022 on the bus fleet to correct critical defects and operational deficiencies discovered during inspections of buses. CTA's scheduled maintenance program consists of planned preventive maintenance work to maintain bus performance. While major overhaul work is performed on a mid-life cycle basis, additional focused maintenance work is required at certain intervals, outside of the overhaul, of the buses life. When certain maintenance tasks are needed to repair or replace, before it reaches its end of useful life and failing with an increased frequency, specific component campaign work is conducted

Budget Impact: As more buses are cycled through the program, unscheduled maintenance on buses will be significantly reduced. If CTA fails to perform standard maintenance on its buses, there will be a continual increase in operating costs and reduced reliability of service.

❖ Replace Buses

Purpose: The CTA has a large bus fleet consisting of 1,864 buses, operating on 129 routes. CTA is committed to providing its customers with the highest quality bus service. The system's success depends on the CTA's ability to renew, maintain and operate its bus fleet in a state of good repair. The backbone of the bus system is the bus fleet.

[Picture: New bus.]

Funding/Description of Proposed Work/Major Elements: In 2018 the CTA will procure the remaining 25 buses to complete the recent Nova bus order totaling 450 buses. The Nova Buses will be equipped with the latest generation of emissions reduction equipment and proven heavy-duty propulsion.

Over the next five years, as part of the CTA's bus modernization plan, CTA will invest $35.5 million in FY 2018-2022 for the purchase of 25 new Nova buses and provide for the initial installment of funds for the anticipated procurement to replace the 1000 Series buses. In addition, CTA will spend $32.8 million in FY 2018-2022 to continue to pay for leased *6400-Series* and *4000-Series* buses that are currently in service.

New bus procurements will include a scope of work that will provide for the engineering, purchase, and inspection of the fully accessible buses. This procurement will also include a spare parts inventory and post-delivery monitoring of vehicle performance and technical support for problem resolution through the warranty period.

Budget Impact: Future purchases of new, fully accessible and technologically advanced buses will reinforce CTA's commitment to quality bus service. Newer buses cost less to operate and maintain and ensure that the CTA can continue to provide reliable, efficient service to its riders.

Rail Projects

<u>Rail Line Improvements</u>

❖ **Rehabilitate Blue Line – O'Hare Branch/*Your New Blue* (YNB)**

[Picture: Picture of CTA Blue line route map, from O'Hare to Damen.]

Purpose: The goal of the *Your New Blue* program is to upgrade the Blue Line O'Hare Branch, which stretches more than 19 miles from downtown Chicago to O'Hare International Airport. The O'Hare Branch carries more than 26 million passengers per year. The project includes removing slow zones, upgrading traction power to better power trains and increase service reliability, modernizing signal systems and rehabilitating rail stations.

The elevated track portion of the O'Hare Branch from Damen through California stations was completed in 2014, and station rehabilitation work on the Damen, Western and California stations was completed in 2014-2015.

In 2016, improvements to the following stations were completed: Addison, Irving Park, Montrose, Harlem and Cumberland. Improvements to all stations focused on state of good repair, providing a safe and dry life extension, and enhancing the customer experience. The Addison station, which was previously not ADA accessible, was also made fully ADA accessible with the addition of a new elevator and reconfiguration of the stationhouse. Further upgrades are planned in FY2018-2022, which include the following:

- Improvements to stations at Jefferson Park, Belmont, Logan Square, Division, Chicago and Grand with emphasis on customer experience, safety, security, and accessibility;

- Signal modernization between O'Hare and Jefferson Park allowing slow zones to be lifted, and improving the safety and reliability for the entire O'Hare Branch;

- Power upgrades and replacement of substation and traction power equipment at East Lake and Milwaukee Substations, which will improve reliability, provide for greater power capacity, and include upgrades to substation buildings.

Funding/Description of Proposed Work/Major Elements: In total, funding of $411.2 million has been allocated and an additional $32.2 million is programmed for this five-year plan for the *Your New Blue* Project. Project work includes removal of track slow zones, station improvements/repairs, and traction power and signal upgrades to better meet the needs of riders. The cumulative impact of these improvements is anticipated to save passengers up to 10 minutes on a typical round trip between downtown and O'Hare. The investment is also expected to generate 1,300 new jobs during construction.

Budget Impact: This project will increase safety, provide faster service, eliminate slow zones, and update stations with contemporary amenities. Without these improvements, there will be continued degradation of aging structures and stations that could lead to increased maintenance needs and lower ridership, increasing costs and decreasing revenue.

❖ **Red Line Extension – Planning/Preliminary Engineering**

Purpose: The proposed Red Line Extension (RLE) project would extend the Red Line from the existing terminal at 95th Street to the vicinity of 130th Street, subject to the availability of funding. The 5.3-mile extension would include four new, fully accessible stations at 103rd Street, 111th Street, Michigan Avenue and 130th Street. RLE would reduce commute times for residents, improve mobility and accessibility, and provide connections to other transportation modes. It could also foster economic development, where new stations may serve as catalysts for neighborhood revitalization. Finally, the RLE Project would also provide a modern, efficient rail car storage yard and shop facility.

Funding/Description of Proposed Work/Major Elements: In October 2016, CTA published a Draft Environmental Impact Study (EIS) on the two alignment options for the project. In November 2016, Mayor Emanuel and CTA announced approval of $75 million in funding for the RLE project. The $3.0 million in the 2018-2022 CIP represents the final allocation of this funding and will provide for the completion of the RLE Final EIS and Preliminary Engineering (PE), as part of the FTA's Capital Investment Grant Project Development Phase over the next five years.

Budget Impact: The project would add CTA rail service on the Far South Side, which currently is only served by bus. After completion of construction and when the extension opens for operation, there would be additional operating and maintenance costs due to the new and additional service and maintenance of infrastructure. This will be at least partially off-set due to efficiencies with bus service modifications.

❖ **North Main Line Red and Purple Modernization (RPM)**

[Picture: Graphic of the RPM Modernization logo. "Improving your commute, improving your community."]

Purpose: The Red Purple Modernization (RPM) Program is proposed as a massive, multistage program to be completed in phases, allowing CTA to make the greatest number of improvements while meeting the public's expectations for timely delivery of the improvements.

On January 9, 2017 CTA signed the Full Funding Grant Agreement with the Federal Transit Administration (FTA), which was the final step in securing the funding needed for the $2.1 billion first phase of the RPM project. RPM Phase One will improve capacity, travel time, ride quality, and safety in one of CTA's highest ridership corridors. The project will allow CTA to increase capacity to meet ridership demands while improving the quality, speed, and passenger comfort of each ride and increasing access to job markets and destinations. The capacity expansion would have the added benefit of bringing this critical infrastructure into a State of Good Repair (SOGR), thereby improving efficiency and service reliability and extending the overall life of this portion of the transit system by 60 to 80 years. Additionally, the project will remedy a two-mile gap in ADA station accessibility on the Red Line by making each of the four RPM Phase One stations (Lawrence, Argyle, Berwyn and Bryn Mawr) accessible to persons with disabilities, which will open up new travel choices and access to more destinations. RPM Phase One will provide numerous benefits to the corridor including:

- Removing the largest physical constraint to increasing train capacity in the RPM corridor, and reducing passenger crowding even as ridership grows;

- Allowing CTA to increase peak service by 30 percent, including adding up to eight more Red Line trains per hour during rush periods, and ultimately accommodating up to 7,200 additional customers per hour on all services;

- Improving speed and reliability, and reducing delays on the Red and Purple lines, saving customers a half-million travel hours each year;

- Modernizing 5.8 miles of signal equipment by increasing flexibility through bi-directional operation capability, and increasing capacity through reduction in allowable headway;

- Modernizing and expanding over 1.5 miles of the Red and Purple lines, increasing asset life by 60 to 80 years;

- Improving station access and capacity by widening platforms, adding elevators and stairways, providing ADA accessibility, and improving passenger and emergency ingress and egress;

- Increasing transit-oriented development opportunities within the corridor;

- Assisting in addressing CTA's commitment to invest in SOGR projects. While RPM Phase One's primary purpose is to increase capacity, the result of these planned infrastructure and operating improvements and enhancements will reduce CTA's SOGR backlog by approximately $850 million.

Funding/Description of Proposed Work/Major Elements: The $2.1 billion cost for RPM Phase One will be funded with FTA Core Capacity Funds, a Federal TIFIA loan, Chicago TIF funds, a CMAQ grant and CTA bonds. Funding of $1.05 billion has previously been allocated and an additional $912.2 million is programmed in the current five-year plan and future funds of $165.4 million have been identified for Phase One of the RPM Program. RPM Phase One and includes the following main projects within the RPM corridor:

- **Advance System Work –** Upgrading the signal system and infrastructure to accommodate the proposed train operation during construction.

- **Lawrence to Bryn Mawr Modernization –** Modernization, expansion, and addition of ADA accessibility at four Red Line stations (Lawrence, Argyle, Berwyn, and Bryn Mawr) and reconstruction and expansion of approximately 1.3 miles of track, structures and viaducts, to accommodate expanded stations and platforms from Leland Avenue on the south to near Ardmore Avenue on the north.

- **Red-Purple Bypass –** Construction of a rail bypass for the Brown Line at Clark Junction, just north of Belmont station. The bypass will remove the largest physical capacity constraint in the RPM corridor, where three separate rail lines on six tracks merge onto four tracks. This work will also realign and replace approximately 0.3 miles of associated mainline (Red and Purple Line) tracks from Belmont station on the south to the stretch of track between Newport and Cornelia avenues on the north, increasing speed, reliability, and capacity in the project corridor.

- **Corridor Signal Improvements –** Installation of a new higher-capacity signal system from approximately Belmont Avenue to Howard Street allowing for increased throughput of trains and increasing reliability of operation.

Upgrades to the Broadway substation are also included in RPM Phase One to increase traction power capacity, both to support the train operation during construction of Phase One and the increased train frequency anticipated in the proposed core capacity service plan at the completion of Phase One construction.

Budget Impact: The net impact of the RPM Phase One project will be favorable to budget. The RPM Phase One Core Capacity Project will increase and improve service to accommodate additional ridership. Upon implementation of the new RPM service plan, capacity will increase by 15% during the peak period, and ridership is anticipated to increase based on the additional capacity. Meanwhile, annual operating and maintenance costs are expected to increase modestly due to factors such as increased vehicle hours and additional staffed entrances, among other items. Overall, once RPM Phase One is implemented, increased revenue from higher ridership levels is anticipated to off-set any additional operating and maintenance costs.

<u>Power & Way Electrical, Signal & Communication</u>

❖ **Replace/Upgrade Power Distribution and Signals**

[Picture: A traction power substation which is part of the power distribution system for CTA rail.]

Purpose: This project will replace/upgrade equipment on a priority basis at various traction power substations currently in service. The equipment at many locations is at end the of its useful service life and in some cases is at or exceeding rated output. This project will correct deficiencies and avoid potential service reductions, due to failure of aging equipment. The upgrading of the power distribution network must be accomplished in order to provide continued safe and reliable transit operations, to minimize the possibility of power shutdowns and service disruptions, and to continue to eliminate slow zones throughout the system.

The traction power distribution system assets consist of 64 substations, five substation tie houses, 294 miles of cable, and 239 miles of third rail. On average, substations by rail line and branch are 43% beyond their useful life with an average age of 28.1 years.

Funding/Description of Proposed Work/Major Elements: FY 2018-2022 CIP funding totaling $42.0 million consists of $25.0 million programmed towards upgrading the traction power system across several O'Hare Blue Line substations and $17.0 million to support the systemwide tactical traction power renewal program where traction power conversion and distribution equipment at select substations, throughout the system, will be replaced.

Budget Impact: Benefits include improved reliability of service, increased speeds and reduced headways, and mitigation of safety issues associated with older traction power distribution cabling equipment in existing substations. Specifically, the replacement of the aged substation equipment and building structures will result in reduction of emergency maintenance expenditures resulting from equipment failures.

<u>Power & Way, Track & Structure</u>

❖ **Infrastructure Safety and Renewal Program**

[Picture: Workers repairing a piece of rail track.]

Purpose: To improve safety and state of good repair projects on CTA's right-of-way infrastructure, this project is focused on critical upgrades, in the absence of funding to do a larger capital replacement project. Funds will be used to rehabilitate track and structure throughout the system. Defective track and structure must be repaired in order to maintain safe and reliable service. As structural elements requiring immediate repair work or replacement are identified, CTA's field forces are dispatched to the site to repair or replace the necessary components. This eliminates the need to impose slow zones and ensures safe operating conditions.

Funding/Description of Proposed Work: Funding will provide for the replacement of ties, running rail, and third rail on the elevated structure within the system. Beyond track renewal, work will focus on key structural elements that have been identified through structural inspections as deficient. CTA has programmed $197.9 million in FY 2018-2022 to rehabilitate elevated track and structure elements throughout the system. CTA continues to rehabilitate track and structure elements in order to eliminate slow zones and upgrade the right-of-way along the elevated structure throughout the rail system.

CTA's 2018 Fast track initiative invests $137.9 million for major track improvements. Locations identified are Green Line South, Green & Pink Line West, Brown Line, Blue Line Congress, and Red & Blue Line Subways. These improvements are focused on strategically planned work that will have the greatest impact on customer service by providing faster and more reliable service.

Budget Impact: CTA's goal for this proposed capital project is to continue to eliminate or significantly minimize slow zones throughout the system, thereby improving service and increasing ridership and revenue while lowering maintenance and operating costs. Without remediation, these defects can have severe impacts on CTA's ability to operate service.

Rolling Stock

❖ Perform Rail Car Overhaul

[Picture: Worker performing rehabilitation work on a rail car.]

Purpose: The Quarter-Life Overhaul on the *5000-Series* rail cars is projected to begin in FY 2019. Quarter-Life Overhaul efforts are intended to be performed on each rail car at approximately six- to seven-year intervals. This maintenance activity will include major component rebuild and any needed repairs to the rail car bodies.

Rehabilitating the rail fleet will improve the reliability, comfort, and cost-effectiveness of transit service, making it more attractive and beneficial to the riding public.

Funding/Description of Proposed Work/Major Elements: FY 2018-2022 funds of $94.2 million will provide for the continued staging of work for the Quarter-Life overhaul of the *5000-Series* rail cars that are due to start in 2019. The overhaul work on the *5000-Series* rail cars will consist of upgrades to various subsystems and other components. The first of the *5000-Series* rail cars were introduced into revenue service beginning in 2012 and will be due for the Quarter-Life overhaul starting in 2019.

Budget Impact: Equipment is more costly to operate and maintain when it is older, outdated, and worn-out. Without aggressive and costly maintenance programs in place, CTA's fleet will continue aging and will grow ever more prone to breakdowns in service, which cause significant impacts to transit riders.

❖ Perform Rail Car Maintenance Activities

Purpose: Funding for this project will provide for an ongoing capital maintenance program that consists of tasks necessary to keep rail cars in service through systematic inspection, detection, and prevention of incipient failure.

Funding/Description of Proposed Work/Major Elements: CTA plans to spend $12.5 million in FY 2018-2022 on the rail car fleet to correct critical defects and operational deficiencies discovered during inspections of rail cars. CTA's scheduled maintenance program consists of planned preventive maintenance work to maintain rail car performance. While major overhaul work is performed on a quarterly and mid-life cycle basis, additional focused maintenance work is required at certain intervals of the car's life, outside of the overhaul cycle. When certain maintenance tasks are needed to repair or replace a component before it reaches its end of useful life and fails with an increased frequency, specific component campaign work is conducted.

Budget Impact: CTA can expect an overall reduction in operating costs as it continues to extend the life of the existing fleet by performing preventive maintenance and rehabilitation on rail cars. If preventive maintenance is not performed routinely, CTA will see a continual increase in operating costs, reduced reliability, and decreased availability of service.

❖ **Purchase Rail Cars**

Purpose: The project provides for phased funding for the next generation of CTA rail cars, the *7000-Series*. The *7000-Series* is designed to replace the oldest rail cars in CTA's fleet. CTA has awarded a contract to CSR Sifang America, a subsidiary of China Railway Rolling Stock Corp (CRRC) to manufacture the *7000-Series* rail cars. As of mid-2017, construction of a new railcar manufacturing plant is underway. The facility is located on the southeast side of Chicago at 135th and Torrence Avenue. The contract order will provide for the production of approximately 400 cars (with further options to purchase up to a total of 846 cars).

[Picture: A new 7000-series CTA rail car.]

Funding/Description of Proposed Work/Major Elements: CTA has programmed $250.8 million over the five-year period to contribute to the purchase of new *7000-Series* rail cars. Current funds will provide for the first of multiple phases of funding which will be required to procure up to 846 cars. Future funds will be required to meet the later phases of this proposed order. The first phase of the purchase will replace the majority of *2600-Series* rail cars that will be at the end of their useful service lives at time of replacement.

The first prototypes of the *7000-Series* rail cars are anticipated to be placed into service starting in late 2019. These cars' features include regenerative braking, which will allow trains to recover braking energy and return it to the electrified third rail to be used by other trains. This results in a net decrease of electrical energy usage compared to older models of rail cars. New rail cars have interior LED lighting to provide higher-quality light for passengers, improved air conditioning system and a video surveillance system that serves as a visible deterrent to crime and provides identification of offenders. Also, each rail car will have an Ethernet train connection that will provide better communication of maintenance and diagnostic information between cars and allow this information to be remotely transferred to maintenance shops for rapid diagnostics and repair solutions to avoid system failures. Replacing older rail cars with the *7000-Series* will provide CTA with modern, updated vehicles that will decrease maintenance and operating costs while enhancing customer comfort.

Budget Impact: The rail car purchase project will decrease the maintenance costs and hours needed to maintain older rail cars. If new rail cars are not purchased, CTA will continue to experience increased operating costs, reduced reliability in the fleet, and decreased service for its customers.

Systemwide Projects

<u>Miscellaneous</u>

❖ **Information Technology (IT)**

Purpose: This initiative will replace laptops, personal computers and system software, providing technology upgrades to business units systems, applications, and hardware at the end of their useful life.

Funding/Description of Proposed Work/Major Elements: The proposed CIP allocates $11.7 million in FY 2018-2022 for periodic replacement of systems, computers and associated components. Programmed funds will also provide for an IT maintenance program. Annual funds have been planned for an IT state of good repair maintenance program to revitalize technologies for high usage devices such as Uninterrupted Power Supply (back-up power source), among others. This maintenance program will

provide for the repair, replacement, and upgrade of IT devices and systems, software or firmware release upgrades, emergency restoration, subject-matter expertise support, and system monitoring.

Budget Impact: If CTA does not implement the information technology program, employees will continue using the out-of-date systems, desktops and laptops that exist today. The new equipment and software will improve productivity, protect against cyber security, and increase efficiency.

- **Equipment and Non-Revenue Vehicle Replacement**

Purpose: The Non-Revenue Equipment Replacement Plan consists of a multi-year plan intended to replace many of the outdated vehicles and equipment in an incremental manner, contingent on funding availability. This replacement plan is divided into three main types of vehicles: Rail-borne equipment, heavy duty equipment and light/medium duty vehicles.
Funding/Description of Proposed Work/Major Elements: FY 2018 funding of $1.9 million will provide for the purchase of capital-eligible equipment that will be used to repair rolling stock and other infrastructure elements that are critical for the support of bus and rail transit operations. Future funding of $7.1 million is programed in FY 2019 – 2022 to support the acquisition of diesel locomotives for snow removal, which will support improved transit operations.

Budget Impact: Non-revenue vehicles provide support for all facets of CTA operations, security and maintenance. When funding is available, replacing vehicles and equipment on an asset life cycle basis keeps maintenance and operations support fleet in working order. The purchase of non-revenue vehicles will increase efficiency of maintenance forces and will reduce cost to maintain old vehicles. Investing in this equipment improve CTA's service to its customers and reduce vehicle maintenance costs.

- **Tactile Signage at CTA Bus Stops**

Purpose: This project will provide tactile signage at CTA bus stops to provide information about the exact bus stop location to customers who are blind, deaf/blind or have visual impairment. While printed public information signs exist today at bus stops throughout the CTA system, they are too high to allow someone with low vision to get close enough to read and are not usable by anyone who is blind. The signs may include raised lettering and Braille to provide a tactile reference. This project will also improve and expand mobility options and help make fixed route public transit an option for more people.

Funding/Description of Proposed Work/Major Elements: Funding of $475,000 will provide for a pilot installation of tactile signs at CTA bus stop poles.

Budget Impact: This project will increase accessibility and safety, and facilitate travel for people with disabilities when using public transportation. It has a potential to increase ridership as it continues to eliminate or significantly minimize transportation barriers for those who are blind, have a visual impairment, or are deaf/blind. It also may reduce the reliance on paratransit services, which would have a positive budget impact on the region.

- **Rehabilitate Rail Stations**

Purpose: CTA will continue its initiative to rehabilitate and reconstruct rail stations throughout the system. CTA currently has 145 rail stations of which 101 are accessible to people with disabilities, per ADA guidelines. Based on funding availability, additional elevators will be installed to provide greater accessibility where needed. Escalators may also be installed to provide for convenient customer entry and exit of stations.

Funding/Description of Proposed Work/Major Elements: The FY 2018-2022 CIP includes $34.0 million to upgrade and enhance rail stations systemwide. Upgrades to rapid-transit stations may include work such as rehabilitating stationhouses; repairing stairs, flooring, platforms, and canopies; removing graffiti and painting; and enhancing lighting and camera systems to provide greater security.

CTA's 2018 Safe and Secure initiative invests $15 million to provide for security enhancements to be made to stations that include lighting, repairs, and other improvements. This multiple year effort is expected to touch over 100 stations throughout the system.

Budget Impact: The project will bring improvements to existing rail stations systemwide and provide cascading benefits to the neighborhoods. By addressing emergent conditions now, CTA will cost-effectively address the stations' long-term maintenance needs, while improving CTA passenger comfort and providing for more efficient and accessible stations systemwide.

❖ **Rehabilitate Rail Stations – Belmont (Blue) Gateway**

Purpose: The Belmont Blue Gateway Project will bring improvements to the street-level entrance to the Belmont subway station. Improvements will provide for a safer and more comfortable environment for pedestrians.

[Picture: Design of the Gateway Turnaround Project at the Belmont Blue Line Station.]

Funding/Description of Proposed Work/Major Elements: The FY 2018-2022 CIP of $2.0 million provides for the final phase of funding required to complete the Gateway Turnaround Project at the Belmont Station on the O'Hare Blue Line. The total construction budget is $17 million where the majority of funds are provided from past CIP years. This project will bring customer amenities to the outside station area such as bus and train arrival signage, bus boarding technology, and pre-boarding payment methods. Additional amenities will include infrared heating, shelters and wind breaks, and audio and accessibility enhancements to improve the customer experience. The project will also include modest upgrades to the rail station to improve patron access, safety, and convenience, as well as address platform repairs that are needed due to water damage.

Budget Impact: The project will bring transformational improvements to existing transportation systems at the Belmont station and provide cascading benefits to the neighborhoods and beyond. By addressing emergent conditions now, CTA will cost-effectively address the station's long-term maintenance needs and maintain the station in a SOGR.

❖ **Implement Security and Communication Projects**

Purpose: Security and safety are of paramount importance for the CTA. A professional security assessment of the CTA system identified a priority investment in equipment and infrastructure to protect the public and CTA employees as well as ensure service continuity. The enhancement of security on the public transit system will further meet the goals of the CTA, which include providing a safe and friendly environment for riders**.** CTA's security system project is an essential part of the agency's goal of protecting the traveling public, CTA employees and critical transportation infrastructure from crime and acts of terrorism. It will also continue to enhance the Chicago Police Department's (CPD) efforts to provide visible security and crime prevention while patrolling rapid transit routes within the city of Chicago.

Funding/Description of Proposed Work/Major Elements: FY 2018 – 2022 funding of $40.2 million will continue to enhance the multi-agency investment between CTA and CPD by adding another layer of anti-terrorism precautions to protect CTA's high-risk, high-consequence mass transit assets and operations from terrorist activities.

CTA's 2018 Safe and Secure initiative invests $18.0 million to replace, modernize, or install cameras systems throughout the entire CTA network. Work will include installing cameras at CTA bus stops, maintaining all operating cameras in a state of art condition, and installing monitors at all rail station kiosks.

Other 2018 funding of $10.2 million will also be used to implement security strategies to conduct targeted surveillance, control access and stop intrusion. This CIP funding supports the continuation of a comprehensive solution for cyber and physical security of critical transit infrastructure in CTA. The Cyber and Physical Security of Critical Infrastructure (CPSCI) Project will include the hardening of supervisory control and data acquisition (SCADA), train control, electric grid, and communications systems to identify, protect, detect, respond, and recover from terrorist activities, both physical and cyber-attacks, against CTA's critical infrastructure.

Budget Impact: Investing in security equipment will have a positive impact on the budget as more customers will feel safer in CTA facilities and vehicles. The anti-terrorism security enhancement is expected to reduce crime and the costs associated with criminal activities throughout the system.

❖ **Program Management for the Capital Construction Program**

Purpose: This project provides funding for a program management team to assist CTA staff in the planning and management of the agency's Capital Construction Program.

Funding/Description of Proposed Work/Major Elements: The scope of work for Program Management includes developing project master plans (PMPs) to define primary work scopes, schedules, and budgets for different types of capital projects. In addition, this project creates specific schedules, cost estimates, and implementation plans to deliver projects, which will assist CTA's engineering efforts to synchronize and analyze design plans and specifications. FY 2018 funding of $6.7 million will continue maintaining up-to-date asset information and developing project requests for the capital plan. Similarly, future funding of $26.2 million is allocated for FY 2019-2022 to continue this project implementation.

Budget Impact: Contracting for these services eliminates the need for CTA to add or reduce staff as construction levels change over time. If CTA does not implement a program management team, it will incur costs for full-time staff who can manage various project and strategic initiatives.

❖ **Bond Repayment, Interest and Finance Cost**

Purpose: This project funds debt service and the cost of issuance of bonds, notes and other indebtedness incurred by CTA when it uses long-term debt to finance crucial capital activities.

Funding/Description of Proposed Work/Major Elements: FY 2018–2022 funding continues to provide for the payment of principal and interest costs associated with financing the GARVEE bond series issued in 2004, 2006, 2008, 2010, and 2011. Funding has also been allocated to provide for the refinancing GARVEE bonds made in FY 2010, 2011, 2015 and 2017. CTA bond funds are used to augment the Authority's infrastructure, facilities and rolling stock. Specifically, such projects include the renovation of stations and facilities, replacement of rail signal systems, replacement of substations

throughout the system, and expansion/replacement of bus and rail rolling stock. Funding for these projects is allocated at $721.9 million for FY 2018-2022.

Budget Impact: By constructing projects on an expedited schedule, CTA can reduce costs, improve service, and better promote ridership on the system.

❖ **Blue Line Traction Power Study**

Purpose: The Blue Line Traction Power Study project will provide an in-depth analysis of the Blue Line's future power needs. This project will conduct a comprehensive traction power study on CTA's Blue Line. A traction power study will enable CTA to make strategic recommendations on critical enhancements to its rail system, increasing its speed, reliability, and efficiency.

Funding/Description of Proposed Work/Major Elements: FY 2018-2022 funding of $625,000 will provide for a study that will enable CTA to make strategic recommendations on critical enhancements to the Blue Line. The study will recommend improvements to increase the capacity on a line that is currently limited in its ability to provide the necessary level of traction power that is necessary to meet growing ridership demand.

Budget Impact: These funds will respond to development trends and will allow CTA to support increased ridership which would benefit revenue stream. It also provides for SOGR.

❖ **Signal Priority & Modernization (Ashland Avenue)**

Purpose: This project proposes to construct a traffic signal interconnect and communication network required to implement transit signal priority (TSP) on Ashland Avenue between Cermak Road and Irving Park Road. This will alleviate congestion, provide customers with a faster trip and reduce bus bunching.

Funding/Description of Proposed Work/Major Elements: The proposed CIP allocates $8.9 million to this project in FY 2018-2022. This network will be a combination of wireless and fiber optic communications that will connect the intersections to the City of Chicago's centralized traffic management software. The network will facilitate communication between transit vehicles and the intersections and will allow for data collection and system management.

Budget Impact: The implementation of this project will reduce the time that transit vehicles spend delayed at intersection queues. TSP can reduce transit delays, decrease travel time and improve transit service reliability.

Support Facilities & Equipment

❖ **Improve Facilities Systemwide**

Purpose: This project will develop a transit improvement program to repair or replace facility deficiencies to ensure the efficiency of maintenance and operations. Planned work includes renewal initiatives for the following: (1) Modernization of rail yards throughout the system to restore, preserve, upgrade and improve the integrity and configuration of the twelve rail yard facilities; (2) Initial staging funds for the construction of a Non-Revenue Vehicle Shop; (3) Critical repairs at CTA facilities systemwide. It will allow CTA to address the deteriorated condition of these facilities, which affects reliability of service to CTA customers and creates safety issues for customers and employees.

Funding/Description of Proposed Work/Major Elements: The rehabilitation of facilities supports crucial elements in providing safe, clean, on-time transit service that connects people and communities. Currently, CTA has seven active bus garages, 10 rail terminals, 17 park-and-ride lots, 106 bus turnarounds, and a variety of other maintenance and support facilities. Both bus and rail operations depend on system support to continue providing timely and efficient service to CTA's customers.
FY 2018 funding of $29.2 million will support facility improvements, including upgrades to various support facilities throughout the system. Future CIP funding of $112.8 million has been allocated in FY 2019 -2022 to construct or improve CTA's bus and rail facilities.

Budget Impact: CTA's facilities are crucial assets in supporting smooth operations throughout both the bus and rail systems, and in providing an overall reduction in operating costs. Keeping these facilities in a state of good repair (SOGR) will reduce operating expenses and costly repairs.

Capital Program Category Historical Comparison

[Graph: Stacked Bar graph of capital funding by asset categories for 2008-2022. There are four asset categories; Operating Offset, Financial, Infrastructure, Fleet.]

($ in thousands)

Asset Category	2008	2009	2010	2011	2012	2013	2014	2015
Operating Offset	40,353	221,212	158,569	146,416	0	0	0	0
Financial	91,665	85,153	67,338	88,544	226,858	152,921	154,214	157,612
Infrastructure	649,462	234,924	340,170	308,617	365,766	401,753	376,274	436,302
Fleet	45,795	139,654	576,136	110,162	574,945	317,095	187,416	561,611
Sub-Total Projects	**827,275**	**680,943**	**1,142,214**	**653,739**	**1,167,569**	**871,769**	**717,903**	**1,155,526**

Asset Category	2016	2017	2018	2019	2020	2021	2022
Operating Offset	0	0	0	0	0	0	0
Financial	160,433	163,290	163,791	162,518	160,302	149,559	149,510
Infrastructure	405,059	1,120,800	669,565	175,977	302,030	145,200	145,410
Fleet	72,333	87,942	63,932	69,519	119,114	111,047	114,288
Sub-Total Projects	**637,825**	**1,372,032**	**897,287**	**408,014**	**581,445**	**405,806**	**409,208**

The graph above compares the annual capital funding programmed across broad asset categories. The capital program is inherently varied, as projects require a commitment of funding when they reach the construction or delivery stage. The graph compares the funding make-up of the previous 10 years with the funding programmed for the five-year program included in this CIP. The fleet category represents programming for bus and rail fleets; the infrastructure category includes all construction projects; the operating offset category is comprised of the portion of the capital program used to fund capital-eligible costs included in the operating budget (discontinued in 2012); and the financial category includes funding to support the capital bond program, as well as for other long-term financing such as bus lease and purchase arrangements.

The flow of capital asset replacement or rehabilitation varies widely from year to year, resulting in irregular funding levels for program categories. Significant funding was set aside for construction initiatives; the first program was funded with CTA and Federal funds in 2007-2009, and the second program was funded largely with State Bonds in 2012-2015. Starting in 2016 and continuing through

2018, CTA is making significant investments in rail line renewal with the ongoing work on the O'Hare Blue Line and the startup of the RPM Phase One project.

Programs for CTA rail fleet renewal are also reflected with the 2010, 2012 and 2015 increases in funding for the purchase of the 5000-Series and next generation 7000-Series rail cars. In 2015, CTA began the planned overhaul of the 3200-Series rail cars. Funding was provided for the bus fleet renewal program from 2012-2015. From 2015 through 2017, CTA placed into service 425 new buses, overhauled more than 1,000 buses, and will overhaul an additional 208 buses in the fleet in 2018-2019. Cost of capital was lower in FY 2010-2011 as a result of a bond restructuring completed in FY 2010. With the retirement of CTA bonds issued in 2005 and the issuance of bonds in 2010 and 2011, the amount of capital funds programmed for debt service will remain level and begin to marginally decrease, and therefore the financial category remains relatively constant from FY 2013 through 2022.

Capital Program Asset Category Comparison for FY 2018-2022

[Graph: Bar graph comparing the level of expenditures for 2018 – 2022 by Capital Project Asset category]

Row Labels	FY18	FY19	FY20	FY21	FY22
BUS ROLLINGSTOCK	13,799,279	23,276,179	21,647,719	23,954,768	37,743,494
FACILITIES	24,875,000	18,875,286	52,273,526	12,000,000	12,000,000
INFORMATION TECHNOLOGY	1,988,645	2,147,010	2,318,636	2,510,000	2,720,500
POWER & WAY	33,500,000	8,500,000	0	0	0
RAIL ROLLINGSTOCK	50,132,547	46,242,512	97,465,903	87,092,262	76,544,504
SECURITY	28,221,237	3,000,000	3,000,000	3,000,000	3,000,000
STATIONS	20,019,710	2,000,000	2,000,000	6,000,000	6,000,000
SYSTEMWIDE	7,790,437	14,980,857	6,690,000	6,690,000	6,690,000
TRACK	137,944,903	15,000,000	15,000,000	15,000,000	15,000,000

The chart above indicates that going forward in the timespan of the five-year CIP, CTA has made substantial commitments to perform SOGR work throughout the system. The largest share of investments is dedicated to the rail and bus fleets, which includes the purchase of next generation series of rail cars, replacement of over 50% of the bus fleet, and future fleet overhauls as funding permits. The second-largest investment is being made to renew and rehabilitate CTA facilities including maintenance facilities for bus and rail, and rail yards. Significant funding is also directed to renew rail track, structure, and power distribution.

The greater share of CTA's investment in the five-year plan is oriented toward the rail system, indicative of the cost to CTA to maintain a dedicated right of way versus the public right of way, where CTA bus service is located. While the rail system is less costly to operate on a daily basis when compared to bus operations and provides significant regional benefits, the rail system requires extensive capital investment to maintain operating standards. Over 80% of CTA's SOGR needs are associated with the rail system.

CTA's largest capital investment to date is the Red and Purple Modernization (RPM) Phase One project totaling $2.1 billion. In order for a capital project of this magnitude to be undertaken, a number of unique capital funding sources are necessary to fund the project to completion.

[Graph: Pie Chart showing the contribution of capital funding sources to the RPM Phase One project.]

Capital Funding Sources	($ in thousands)
Federal- 5309 Core Capacity	$956,608
City TIF - Bryn Mawr	$10,000
CTA Bonds	$355,953
CMAQ	$125,000
Transit TIF/ TIFIA Loan	$622,000
CTA Operating Funds	$61,749
Total	$2,131,311

FTA Core Capacity funds were made available from the Federal Transit Administration (FTA) to CTA for the RPM Phase One project where the corridor is currently over capacity. CTA entered into a Full Funding Grant Agreement (FFGA) with the FTA in January 2017 to secure funds of $956.6 million for the project. CTA entered into an agreement with the City of Chicago to provide tax increment financing program funds from a newly-created Tax Increment Financing District, approved by the Chicago City Council and specifically authorized by the Illinois state legislature for the RPM project, to fund repayment of an anticipated $622 million loan to cover project costs. CTA will also provide funding of $417.7 million from internal sources, including proceeds of CTA bonds and some operating funds. Additionally, $10 million of the City's TIF funds and $125 million of federal Congestion Mitigation and Air Quality (CMAQ) funding have been allocated for the RPM Phase One project.

Competitive Grant Opportunities

CTA submitted grant applications seeking funds from numerous federal and state competitive grant programs, including the following programs:

- Bus and Bus Facilities/Clean Diesel grants
- Low or No Emission Vehicle Deployment Program (Low-No Program)
- EPA's National Clean Diesel Funding Assistance Program
- Transportation Investment Generating Economic Recovery (TIGER) or TIGER Discretionary Grant program
- Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program
- Safety Research and Demonstration (SRD) Program
- Mobility on Demand (MOD) Sandbox Demonstration Program
- Invest in Cook (Chicago's Cook County Department of Transportation & Highways)
- RTA Innovation, Coordination, and Enhancement program (ICE)
- Congestion Mitigation and Air Quality grant (CMAQ)
- Unified Work Program (UWP)
- Department of Homeland Security (DHS) grants

As noted above, CTA recently secured Federal Core Capacity funding; the RPM Phase One was the first project in the country to receive funding through the new program.

With a growing backlog of assets that are not in a state of good repair based on existing capital funding levels, the CTA continues to aggressively pursue these funding opportunities. CTA has requested funding from a variety of competitive sources, including the following:

- **Congestion Mitigation and Air Quality (CMAQ) Grant –** The Federal CMAQ program funds surface transportation improvements designed to improve air quality and mitigate congestion. The Chicago Metropolitan Agency for Planning (CMAP) administers the CMAQ program.
  CTA will receive a $125 million CMAQ grant that will support Phase One of the RPM Project. This major initiative will completely rebuild the northern portion of the Red Line from Belmont to Howard station and the Purple Line, which extends to Linden station in Wilmette. The RPM corridor was built in phases from 1900 through the 1920s. The Red Line is Chicago's busiest rail line, serving some of the most densely populated neighborhoods in the country, and the number of riders along this corridor has grown significantly in recent years. The first phase of RPM includes the Red-Purple Bypass (RPB), the Lawrence to Bryn Mawr Modernization (LBMM), and the Corridor Signal Improvements (CSI).

  CMAQ will also provide $8.9 million for the Ashland Avenue Transit Signal Priority (TSP) and Signal Modernization – Cermak Road to Irving Park Road project. This project proposes to construct a traffic signal interconnect and communication network required to implement transit signal priority (TSP) on Ashland Avenue between Cermak Road and Irving Park Road. This network will be a combination of wireless and fiber optic communications that will connect the intersections to the City of Chicago's centralized traffic management software. The network will facilitate communication between the transit vehicles and the intersections and will allow for data collection and system management. The implementation of this project will reduce the time that transit vehicles spend delayed at intersection queues, TSP can reduce transit delay and travel time and improve transit service reliability, thereby increasing transit quality of service.

  In addition, CTA also applied for $10 million in FY 2018-2022 CMAQ program funds for the purchase of up to 10 electric buses and two chargers. The CMAP MPO (Metropolitan Planning Organization) met on October 11, 2017 and approved the FFY 2018-2022 CMAQ Program, which includes $8 million for the electric bus purchase project.

- **Core Capacity Program –** Core Capacity is a project category under the Federal Transit Administration's (FTA) Capital Investment Grant (CIG) Program. Core Capacity projects are substantial investments in existing fixed-guideway corridors that are at capacity today or will be in five years, where the proposed project will increase capacity by at least 10 percent.

  In 2017, FTA approved a Full Funding Grant Agreement (FFGA) for $956 million of Core Capacity funds for Phase One of the RPM Project. As of this date, FTA has already allocated $291 million of Core Capacity funds for the Project with the remaining funds to be received in future years. The Core Capacity funds will allow the CTA to construct RPM Phase One.

- **Homeland Security/Transit Security Grant Program –** The Transit Security Grant Program (TSGP) is one of the Department of Homeland Security's (DHS) grant programs that directly support transportation infrastructure security activities. DHS focuses its available transit security grant dollars on the highest-risk systems. It has identified critical infrastructure assets that are vital to the functionality and continuity of major high risk transit systems and whose incapacitation or destruction would have a debilitating effect on national security, public health, safety, or any combination thereof. Operators of public transportation agencies (which include intra-city bus, commuter bus, ferries, and all forms of passenger rail), compete for funding both locally and nationally.

  CTA is a direct recipient of TSGP awards and utilizes funding to protect the traveling public and critical transit infrastructure from acts of terrorism. The Chicago Police Department (CPD) acts as

the primary security provider for CTA within the City of Chicago. CTA and CPD have entered into separate intergovernmental agreements for each TSGP award in order to certify the TSGP relationship between the two agencies. These agreements define how funding will be used to meet CPD's investment costs, reporting requirements, and other aspects of implementation.

- DHS/TSGP provides funding to owners and operators of transit systems to protect critical surface transportation and the traveling public from acts of terrorism and to increase the resilience of transit infrastructure. In FY 2017, this program provided to the nation $88 million of which CTA was awarded $10.2 million. Eligibility for TSGP funding is based upon daily ridership of transit systems that serve the nation's key high-threat urban areas. The Department of Homeland Security is committed to working with the nation's response community in the national effort to combat terrorism and secure our homeland.

- Cook County has initiated a long range transportation plan and funding program called "Invest in Cook," where local and regional governments have the opportunity to apply for assistance to help cover the cost of planning and feasibility studies, engineering design, and construction improvements that advance the priorities set forth in the long range transportation plan. The CTA has received an award of $235,000 for a traction power study on the Blue Line.

- **Unified Work Program (UWP) –** In order to fulfill federal planning regulations, the UWP lists planning projects the Chicago Metropolitan Agency for Planning (CMAP) and other regional agencies undertake each year to enhance transportation in northeastern Illinois. The UWP is designed to run in conjunction with the State of Illinois' fiscal year timeline of July 1 to June 30. The final UWP document includes the transportation planning activities to be carried out in the region, detailing each project's description, scope, costs and source of funding. In FY 2017 CTA was awarded $500,000 to fund one project: Program Development. This project will facilitate efforts to coordinate the provision of capital projects for customers in CTA's service area and to identify projects within the Chicago-area regional five-year Transportation Improvement Program (TIP).

- **TIGER –** The Transportation Investment Generating Economic Recovery (TIGER) Program is a competitive grant program administered by the U.S. Department of Transportation (USDOT). The TIGER program funds surface transportation infrastructure projects that will have a significant impact on the nation, a metropolitan area, or a region. The grant program focuses on capital projects that generate economic development and improve communities' access to reliable, safe and affordable transportation.
  In recent years CTA has received the following TIGER funds: (1) $16 million for track work on the O'Hare Blue Line, (2) $20 million for the 95th Terminal Project and (3) $25 million for the Green Line Garfield Station in the Washington Park neighborhood.

- **TIFIA Loan Program –** The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) established a federal credit (loan) program for eligible transportation projects through the USDOT. The savings from TIFIA financing come from two primary sources: (1) CTA draws TIFIA funds on an "as needed" basis rather than accruing interest on funds before they are used and (2) the interest rate on this borrowing is set at a rate lower than traditional financing. TIFIA financing is a highly recommended form of borrowing as it makes financing projects more affordable and maximizes borrowing capacity.

  CTA has received Federal TIFIA loans for three major capital projects. In 2014, CTA received a federal TIFIA loan for $79.2 million as part of an overall $280 million funding package to renovate

the Red Line's 95th Street Terminal. In 2015, CTA entered into a $120 million TIFIA agreement to support the $411 million Your New Blue program. In 2016, CTA received a TIFIA loan for $254.9 million in funding as part of $719.8 million project to purchase four hundred new *7000-Series* rail cars.

In 2018, CTA will seek a TIFIA loan for $622 million as part of the funding for the Red and Purple Modernization Project.

- **Bus and Bus Facilities Program –** The FTA Bus and Bus Facilities Grants Program (Bus Program), newly authorized under the FAST Act, is a competitive program that finances capital projects to replace, rehabilitate, purchase or lease buses and related equipment and to rehabilitate, purchase, construct or lease bus-related facilities. The purpose of the program is to improve the condition of the nation's public transportation bus fleets, to expand transportation access to employment, to educational and healthcare facilities, and to improve mobility options in areas throughout the country.

  The CTA is dedicated to replacing its older diesel buses, currently in service. In 2017, CTA applied for Bus and Bus Facilities grant funding for 20 diesel plug-in hybrid and 20 diesel 40-foot fully accessible transit buses. Also in 2017, CTA applied for the purchase of 40 new buses that will replace 40 higher-emissions 1998 diesel buses, which are beyond their 12-year service life and still operate in CTA's fleet. The new buses will meet stricter EPA regulations and yield significant emissions reductions of CO2, HC, CO, PM, and NOx, which threaten public health within the CTA's service area.

- **Electric Buses –** Low or No Emission Vehicle Deployment Program – The FTA Low or No Emission Vehicle Deployment Program (Low-No Program), newly authorized under the FAST Act, is a competitive program that finances the purchase or lease of zero-emission and low-emission transit buses, related equipment, and facilities. The purpose of the Low-No Program is to support the transition of the nation's transit fleet to the lowest polluting and most energy efficient transit vehicles, thereby reducing local air pollution and direct carbon emission, and to support the deployment of technologically advanced U.S.-made transit buses.

  The CTA is committed to replacing its older diesel buses, currently in service, with battery-powered, zero-emission, all-electric buses with en-route charging capabilities. In 2016, CTA was awarded $3.6 million in Low-No Program funding to expand its electric bus fleet by purchasing up to four electric buses and two chargers. CTA continues to request additional funding.

- **Electric Buses –** EPA's National Clean Diesel Funding Assistance Program – The EPA's Clean Diesel Program provides support for projects that protect human health and improve air quality by reducing harmful emissions from diesel engines. This program includes grants funded under the Diesel Emissions Reduction Act. The authority for Clean Diesel funding comes from the Diesel Emissions Reduction Act (DERA), part of the Energy Policy Act of 2005.

  In 2016, the EPA awarded CTA $1.8 million in Clean Diesel funding to purchase up to five electric buses. These new buses will replace 1998 higher-emitting diesel buses, which are beyond their 12-year service life and still operate in CTA's fleet. EPA initiated a further funding opportunity in 2017 and CTA applied for $1.08 million in funds toward the purchase of three zero-emission electric buses.

During FY 2018-2022, CTA will continue to aggressively pursue additional funding under these competitive grant programs.

Unfunded Capital Need

In FY 2010, the FTA published the National SOGR Assessment Study, which provided a comprehensive analysis of the costs required to bring the nation's rail and bus transit systems into good operating order. The report showed that transit agencies nationwide are struggling to maintain aging assets. The deferred maintenance backlog is estimated to be $50 billion for the seven-largest transit agencies, including CTA, and approximately $78 billion for all 690 transit systems nationwide.

An update was provided as a part of the "2015 Status of the Nation's Highways, Bridges and Transit: Conditions and Performance" report (known as the C&P report); this biennial report was issued to Congress jointly by FTA and FHWA in February 2017. The deferred maintenance and replacement backlog for public transit is estimated to be conservatively at $89 billion (in 2012 dollars). This backlog is expected to grow by $2.5 billion each year – unless sufficient dedicated funding is invested to slow or stop the growing maintenance deficit.

The report also indicates that $26.4 billion per year is needed per year to improve the condition of the nation's transit rail and bus systems. In 2012, total spending to preserve and expand transit systems was $17 billion. If transit investment is sustained at those levels, overall transit system conditions are expected to decline over the next 20 years and increasing the transit system preservation backlog from an estimated $89.8 billion to $122 billion.

From 2010 through 2015, federal transit funding remained relatively flat, and only in 2016 with the FAST Transit Program Authorization have there been marginal increases. Going into FY 2018, the national transit SOGR backlog continues to grow and is approaching $100 billion.

The RTA's asset condition assessment, which was originally prepared in 2010 and last updated at the end of 2016, defines the region's total capital reinvestment needs over a 10-year period; RTA's assessment has estimated total needs at $37.67 billion, which includes investment needs for CTA, Metra, and Pace. According to the RTA's analysis, CTA's share of this total 10-year reinvestment need is $23.08 billion or 61.3% of the total regional amount.

Approximately 54% ($12.46 billion) of CTA's 10-year reinvestment need of $23.08 billion is needed to address assets that are past their useful life (the SOGR backlog). The remaining $10.62 billion address the normal reinvestment needs expected over the 10-year period.

From an asset category perspective, the $23.08 billion is split between approximately 82% for rail and 18% for bus assets.

[Chart: CTA's SOGR back log and 10yr Reinvestment]

			(in $ billions)
Mode	SOGR Backlog	10 Yr. Normal Reinvestment	Total
Rail	$11.05	$7.84	$18.89
Bus	$1.39	$2.73	$4.12
Share	$0.02	$0.05	$0.07
Total	**$12.46**	**$10.62**	**$23.08**

CTA continues investing in upgrading or replacing system assets, yet the unfunded capital need continues to grow with each year. Even if the entire capital backlog was funded, CTA estimates a need of $950 million annually just to keep the system in a SOGR. The average capital funding level over the period FY 2018-2022 is $540 million.

[Graph: bar graph identifying the level of spending from 2018 – 2022 to maintain a State of Good repair (SOGR).]

	2018	2019	2020	2021	2022	TOTAL
Federal Funds	$328,063	$308,014	$402,445	$305,806	$309,208	**$1,653,537**
Federal 5309 Core RPM	$100,000	$100,000	$100,000	$100,000	$100,000	**$500,000**
RTA Funds	$615	$0	$79,000	$0	$0	**$79,615**
CTA Funds	$468,609	$0	$0	$0	$0	**$468,609**
5Yr. Avg	$540,352	$540,352	$540,352	$540,352	$540,352	**$2,701,762**
SOGR	$950,000	$950,000	$950,000	$950,000	$950,000	**$4,750,000**

The region's backlog and 10-year investment need continues to grow since the previous assessments in inflation-adjusted dollars. The shortage of capital funds needed to support the region's systems will continue to present significant challenges for the region and specifically for CTA to reduce the number of assets beyond their useful life benchmarks.

CTA routinely evaluates the additional funding needed to reach a SOGR. CTA's unfunded capital needs have manifested themselves in a variety of ways across its system.

Right-of-Way

- Slow zones are established to provide safer service where rail right of way has deteriorated; 16.9 miles (7.6%) of CTA's rail system tracks are currently designated as slow zones. The Blue Line Forest Park Branch, North Red Line, and South Green Line contain more than 60% of the entire rail system's slow zones. Capital track work projects are currently focused on these lines to remediate and prevent future slow zones.

Rail Stations

- Of CTA's 145 rail stations, 47 (32%) are considered to be less than adequate and in need of rehabilitation or replacement;
- As of 2017, 43 stations (30%) are not ADA accessible;
- Water infiltration is a constant battle in subway stations. Infiltration is particularly problematic along the Blue Line subway, where leaks from water and sewer mains result in corrosion and degradation of the infrastructure of these stations;

- Approximately 50% of the escalators in the system are beyond their standard useful life guideline of 25 years, with some escalators dating back to the 1950s. CTA maintains over 200 escalators throughout the system;
- Elevators on the CTA system experience extraordinary wear and tear from riders and weather conditions, making them difficult to maintain without major capital work throughout their useful life. Elevators are critical to maintaining the accessibility of the system for the elderly, disabled, and families with strollers. CTA maintains approximately 160 elevators throughout the system. CTA invests annually to keep existing elevators and escalators operational.

Rail Structures

- The vast majority of viaducts on the Red and Purple Lines date back to the early 1920s. These require permanent exterior braces and regular removal of loose concrete to protect traffic below.

Rail Subway Structures

- The State Street (Red Line) and Dearborn (Blue Line) subways were built in 1943 and 1951 and are in need of ongoing maintenance, which includes grouting of the tunnels. Ventilation and lighting systems are in need of repair and replacement throughout all subways to provide for a safe, secure and improved environment for transit operation in the subway.

Rolling Stock

- Aging equipment decreases service reliability, which creates delays for riders. In recent years, CTA has placed into service 714 new 5000-Series rail cars and has awarded a contract to procure 400 new 7000-Series rail cars, yet 24% of CTA's rail fleet remains beyond its useful life guidelines. Approximately 55% of CTA bus fleet will be due for replacement within the timespan of the five-year capital plan. As of September of 2017, the average age of the CTA bus fleet is 8.2 years.
- CTA owns and maintains over 470 vehicles that support CTA service. Types of vehicles include rubber wheeled vehicles such as sedans, trucks, and vans used for managing service and transporting revenue vehicles. In addition, CTA's heavy vehicles and equipment – such as cranes, off-road vehicles, and trailers – support the rail line operations. As of 2017, approximately 20% of the non-revenue vehicle stock is beyond the expected useful life and is due for replacement.

Maintenance Facilities

Although CTA has planned funds for this program, the level of funding is insufficient to bring all facilities to a SOGR standard.

- Maintenance facilities require significant improvements to adequately support the bus and rail fleet. Many of the buildings that currently support the maintenance of the system are less than adequate including bus garages (78%), rail shops (24%), and other facilities (43%). Six of CTA's maintenance buildings are more than 100 years old and have not received substantial rehabilitation;
- Electrical switch gear equipment at two garages (Forest Glen and North Park) dates back to the late 1950s. Failure of this switch gear would result in increased operating costs and reduced service;
- Three of CTA's seven bus garages have boilers purchased in the mid-1980s that have exceeded their useful life guideline of 25 years and require significant ongoing costs to keep them from

failing. New energy-efficient boilers could save CTA an estimated 20% on gas bills and would require less maintenance.

Substations

Approximately 42% of CTA's substations in the system are beyond the recommended useful life of 30 years. As of 2017, 10% of all substations are considered to be less than adequate. With a dedicated traction power program, CTA can continue to upgrade entire substations, upgrade systems within existing substations, or include the possibility of using tie houses or energy storage devices where an entire substation may not be needed. In addition, there are locations on the rail system where current demand may require a new substation to effectively meet power needs.

Operating Budget Impact of Capital Program Projects

A robust capital improvement program not only enhances customer service, safety and reliability, but it also minimizes the steady increases in operating and maintenance costs, and thereby allows CTA to operate more efficiently. The $2.7 billion in capital investments planned for the next five years will allow CTA to achieve cost savings and curtail the increases in maintenance costs that would result from a lack of investment. The following section highlights the impact of capital investments on key areas of the operating budget.

As of 2017, investments in the bus fleet placed 425 new standard clean diesel buses into revenue service, renewing approximately 23% of the fleet, and reducing maintenance costs for this segment of the fleet by up to 30% over the next five to 10 years. Recent investments in the overhaul of CTA New Flyer Series bus fleet have reduced bus fleet material expenses and failure maintenance costs by over 50%; these costs were increasing prior to overhaul of these buses.

A total of 714 new *5000-Series* rail cars are now in service and represent over 50% of the rail fleet. As a result, CTA expects substantial annual costs savings in maintenance material and power costs in the range of $8 to $10 million annually. Meanwhile, the recent CTA procurement secures the purchase of 400 new *7000-Series* rail cars to be delivered beginning in 2019 and through 2022. Options to the procurement contract would provide for an additional 446 cars and are expected to be executed beginning in FY 2021. The replacement of CTA's oldest fleet cars with modern efficiently powered vehicles will reduce operating and maintenance costs by up to 40% over the next decade.

The Red and Purple Modernization Phase One Project represent CTA's largest capital investment in the system to date. The $2.1 billion investment along the corridor will provide many benefits including removing physical constraints that will allow for increased train capacity to meet ridership demands, increase train speeds, and improved reliability, especially during peak service. The project addresses SOGR needs by modernizing over 5.8 miles of signals and 1.5 miles of line structure and track, and extends asset structure life by 60 to 80 years. Altogether, once RPM Phase One is implemented, annual operating and maintenance costs will increase by approximately $5.5 million in 2016 dollars. Meanwhile, CTA anticipates that ridership growth will lead to $8.1 million in additional revenue, based on the FY 2016 average fare for rail ($1.25). On a net basis, revenue is estimated to be approximately $2.5 million more than the anticipated operating and maintenance cost increase.

A significant investment is being made to the Blue Line O'Hare Branch which will reduce the round-trip travel time between downtown to O'Hare Airport by 10 minutes compared with conditions before the project. The time savings not only produces a better, faster ride for customers, but also a reduction in the overall operating costs of the service.

CTA continues to focus on the renewal and SOGR work for the rail line structure systemwide. This includes recent investments made to the Brown (Ravenswood) Elevated, Blue (O'Hare), Red (Dan Ryan), Purple (Express) and Green (Lake/Laramie) lines to address slow zones over 21.3 miles of track, focusing on over 112,000 linear feet of track, which were restricted to speeds as slow as 15mph. The signal system on the Brown (Ravenswood Loop Connector) Line is being replaced with a modern efficient signaling system.

In addition, investments continue to be made to upgrade the rail traction power system at strategic locations that include the Red, Brown and Blue Lines. Investments will provide for greater power capacity and redundancy to support the system.

In 2018, the CTA plans to implement a comprehensive set of energy efficiency improvements for several CTA facilities. CTA will leverage these efficiency projects at multiple bus and rail facilities to make an investment that will return value annually in the form of lower energy and operational costs. Work may include replacing outdated, inefficient lighting, controls, mechanical equipment and high-bay doors with modern, energy-efficient lighting, controls and equipment. There are several opportunities within CTA's portfolio for energy reductions as identified based on-site assessments completed to date. CTA has and will continue to perform detailed audits of existing equipment and provide recommended system replacements and improvements.

Each of the project investments described above offer one or more of the following benefits to the CTA and/or to the region: (1) operational savings; (2) maintenance cost reduction; (3) positive impact on ridership; (4) travel time reduction; (5) supports an economically competitive region; and (6) environmental sustainability or quality of life.

History of the Agency

1859
The beginning of public transit in Chicago; early service is horse drawn.
[Photo: Horse Drawn Carriage Car]

1882
The Chicago City Railway obtains rights to operate San Francisco- style cable cars.
[Photo: Cable Car]

1892
The Chicago and South Side Rapid Transit Company opens on June 6, bringing elevated train service to Chicago. At the turn of the century, four separate transit railroads are operating in Chicago. The first trains, powered by steam, are quickly converted to electricity.
[Photo: 1890's elevated train]

1897
Elevated trains are built along available rights-of-way, often above alleys and less heavily used streets. The Loop opens, connecting rapid transit lines serving the North, South and West sides of Chicago.

1911
The rapid transit companies form a trust that, in 1913, allows free transfers between the carriers for the first time. This also marks the start of through-routing trains between the North and South Sides.
[Photo: Elevated junction downtown Chicago]

1914
On February 1, four streetcar companies unite under a single management, the Chicago Surface Lines. At its peak, the Chicago Surface Lines operates along 1,100 miles of track and becomes the largest and most heavily-used streetcar system in the world.
[Photo: Electric Street Car]

1917
Buses are first used in Chicago as the Chicago Motor Bus Company is created. Bus use is limited to Chicago boulevards and parks.
[Photo: 1917 double decker bus with open seating second level]

1922
The Chicago Motor Coach Company succeeds the Chicago Motor Bus Company.

1924
The four rapid transit 'L' companies merge to create the Chicago Rapid Transit Company.

1943
To ease traffic congestion, the U.S. Department of the Interior, the Public Works Administration, and the City of Chicago finance the State Street Subway.
[Photo: State Street Subway. Train car surrounded by train operators]

1945

The Chicago Transit Authority, an independent government agency, is formed when the Illinois General Assembly passes the Metropolitan Transit Authority Act. In the same year, the City of Chicago passes an ordinance granting the CTA the exclusive right to own and operate a unified, local transportation service. Voters pass the Act and Ordinance in a referendum on June 4.

[Picture: Initial CTA logo. Circle , red filling with diagonal letters left to right spelling CTA]

1947

The CTA begins operations by issuing $105 million in revenue bonds to purchase assets of the Chicago Surface Lines and the Chicago Rapid Transit Company.

1951

The Dearborn Street subway opens.

1952-53

Through additional bond issues, the Chicago Motor Coach Company, a portion of the Chicago Aurora and Elgin Railway, and the Chicago, Milwaukee, St. Paul and Pacific Railroad rights-of-way are added to the CTA.

1958

The Congress branch opens along the median of the newly-built Congress expressway, connecting Forest Park with the Loop through the Dearborn Street subway, with trains continuing to Logan Square on the northwest side.

[Photo: Congress branch rail line running in the median of the Congress Expressway]

1964

The CTA obtains federal funding to create the first "light rail" service, the Skokie Swift. The Skokie Swift operates on track lines purchased by the CTA from the Chicago North Shore & Milwaukee Railway. Eventually, the overhead wire is eliminated and the trains become two cars, allowing the Skokie Swift to become a popular rail shuttle and suburban inter-city bus link.

1974

By the early 1970s, the popularity of car travel and declining ridership levels threaten the financial stability of the local public transit providers, including the CTA. Therefore, the Illinois General Assembly creates the Regional Transportation Authority (RTA) as a fiscal and policy oversight agency committed to providing an efficient and effective public transportation system. Today, the RTA continues to provide fiscal oversight to the CTA, Metra and Pace.

[Picture: Blue and white RTA logo]

1984

The CTA responds to changing demographics during the 1970s by expanding the West-Northwest Service from Logan Square to Jefferson Park, and then along the Kennedy Expressway median to River Road in Rosemont. Finally, the northwest transit extension is completed at O'Hare Airport, providing a station within the airport terminal.

[Photo: CTA Rail Service to O'Hare Airport]

1993
The Dan Ryan branch, formerly linked to the Englewood and Jackson Park branches, is linked with the Howard branch. The new Lake to Englewood-Jackson Park service is rerouted to use the Loop Elevated. The Midway Orange Line is completed, linking the downtown elevated Loop to the Southwest side airport. Its completion makes Chicago the only city in the United States with public transportation connecting two major airports.
[Photo: Opening of Midway Orange line, rail train breaking through banner]

1996
The CTA celebrates the re-opening of the rehabilitated Green Line, improving the service to customers on the West and South sides of Chicago.
[Picture: Green Line route map Harlem/Lake to 63rd/Cottage Grove and Ashland/63rd]

2006
The CTA introduces the Pink Line as part of a package of bus and rail service improvements for the West Side and western suburbs. The Pink Line provides more frequent service and improved travel times between the 54th/Cermak station and the Loop.
[Picture: CTA logo black background CTA in pink letters. Caption Think Pink!]

2009
The final regularly- scheduled bus routes are added to the CTA Bus Tracker. Customers are able to access information online and via text messaging, and receive email notification of predicted arrival times and service alerts.
[Picture: CTA Bus Tracker App)

2010
The CTA begins testing the prototypes of a brand new family of 'L' cars, the 5000-Series rail cars. These advanced cars result in a smoother, more comfortable ride and provide both operational and maintenance efficiency.
[Photo: 5000 series rail car on the Pink Line]

2011
Train Tracker is launched in January 2011, providing customers with information on estimated train arrival times for all rail stations across the CTA's eight rail lines.
[Picture: CTA Train Tracker App]

2012
The CTA rolls out large investments in expanding and improving rail service, including launching the 5000-Series 'L' cars into revenue service, opening new stations in the West Loop and Skokie, and rehabilitating seven stations on the North Red Line that are over 100 years old.
[Photo: Updated elevated station looking towards downtown]

2014

In July, the transition to Ventra, a new fare payment system, is completed. Ventra is built on open standards, which means customers can also pay using contactless bankcards and mobile phones. Ventra combines the convenience of a contactless card and an account-based system with the ability to have any type of fare value or pass – or both – on one card.

[Picture: Ventra cards]

2017

This year marks the CTA's 70th anniversary. In 1947, a loaf of bread cost 13 cents, a gallon of gas cost 15 cents, and a new car could be purchased for $1,300. Jackie Robinson joined the Brooklyn Dodgers, and "Miracle on 34th Street" debuted. And in October of that year, buses and trains in Chicago began operating under a new governmental organization: the Chicago Transit Authority. Prior to 1947, several privately owned companies built and operated elevated train, streetcar and bus lines throughout Chicago. State legislation in 1945 created the CTA, which consolidated various street railway and rapid transit systems. CTA officially began operations on October 1, 1947. A third company that only operated buses was acquired on October 1, 1952, completing the consolidation of mass transit in Chicago under the CTA.

[Picture: CTA 70 year anniversary poster]

2017 also marks the 125th anniversary of 'L' service in Chicago. The first 'L' service in Chicago began on June 6, 1892, when a four-car train of wooden cars pulled by a small, coal-burning steam locomotive departed a modest terminal at 39th Street just east of State Street, headed for its downtown terminal straight north at Congress Street. A year later, service was extended to bring passengers to the World's Columbian Exposition in Jackson Park.

[Picture: CTA 70 year anniversary poster]

This first segment of the 'L' system lives on today as part of the Green Line – the very first portion of the very first line on what has become a unified system of elevated, at-grade, and underground railways that Chicago and neighboring communities have, in many ways, grown up around.

Transit Facts

Creation of CTA

The CTA was created by state legislation and began operating on October 1, 1947, after acquiring the properties of the Chicago Rapid Transit Company and the Chicago Surface Lines. On October 1, 1952, the CTA became the sole operator of City of Chicago transit when it purchased the Chicago Motor Coach System.

CTA Governance

The CTA's governing arm is the Chicago Transit Board, which consists of seven members. The Mayor of Chicago appoints four board members, subject to the approval of the City Council and the Governor of Illinois. The Governor appoints three board members, subject to the approval of the State Senate and the Mayor of Chicago.

In 1974, the Regional Transportation Authority (RTA) was created by state legislation. The RTA serves as the CTA's fiscal oversight agency.

Service Area	
Area	308.5 square miles of Chicago and 35 nearby suburbs
Population	3.3 million
Coverage	81% of public transit trips in the six county Chicago metropolitan area

Bus	
Number of Buses	1,864
Routes	129
Stops	10,768
Bus Route Miles	1,536
Bus Miles Traveled per Day	161,192
Ridership (2017 Forecast)	248.9 million

Rail	
Number of Rail Cars	1,456
Stations	145
Rail Track Miles	224
Rail Miles Traveled per Day	233,906
Ridership (2017 Forecast)	231.2 million

Daily Ridership (2017 Forecast)	
Average Weekday	1,539,383
Average Saturday	933,598
Average Sunday/Holiday	687,730

[Picture: Picture of all rail line routes and bus routes in the city. A zoomed in picture of the rail lines and bus routes within the Chicago Loop.]

Operating Funding Summary

The CTA's total budgeted revenue for 2018 is $1,514.5 million. There are two primary sources of operating revenue for the CTA: system-generated revenue through fares and other sources, and public funding, mostly through the Regional Transportation Authority (RTA). System-generated revenue is projected to be $707.6 million for 2018 and public funding is projected to be $806.9 million. The following table represents 2018 estimated revenue by source.

[Table of Total Revenue budgeted for 2018]

Total Revenue – All Sources (in Thousands)	2018	Percentage
Fares and Passes	$583,105	39%
Reduced Fare Subsidy	$28,322	2%
Advertising, Charters and Concessions	$38,347	3%
Investment Income	$1,600	0%
Statutory Required Contributions	$5,000	0%
All Other Revenue	$51,202	3%
Public Funding	$806,919	53%
Total Revenue	$1,514,495	100%

[Graph: Pie chart of Total Revenue budgeted for 2018 (information provided in table above).]

The following is a description of sources of system-generated revenues and public funding for the CTA.

System-Generated Revenues

The CTA's system-generated revenue is forecast to be $707.6 million for 2018. This revenue is derived from the sale of fares and passes, subsidies for free and reduced fare riders, advertising, investment income, statutory required contribution from local governments by provision of the RTA Act, and other revenues. These revenues are further defined below.

Fares and Passes

Revenue from fares and passes is forecast at $583.1 million in 2018 and is the largest portion of system-generated revenue. The CTA's revenue from fare and passes includes cash fares and full-fare and reduced-fare cards utilizing the Ventra system. The CTA also sells 30-day full fare and reduced fare passes, along with one-, three- and seven-day passes, which can be loaded onto a Ventra card. Additional pass revenue comes from the CTA's U-Pass for local university students, bulk sales of passes, and METRA Link-Up passenger revenue. Disposable one-day and three-day passes and single ride tickets are also available to customers at Ventra machines. In the 2018 budget, CTA has proposed a base full fare increase of $0.25 and a 30-Day Pass price increase of $5 to generate $23 million in additional revenue.

Reduced Fare Subsidy

This funding represents the reimbursement of revenues foregone by the Service Boards due to providing reduced and free fares to senior citizens and riders with disabilities, as mandated by federal and state law. The funding is subject to the terms of the grant agreement, state statute, and annual state appropriation. Reimbursement amounts are allocated to the Service Boards based on qualifying passenger trips taken during the grant year. CTA has received only half of the historical reduced fare

subsidy funds since 2015 as a result of state budget cuts. It is assumed that the full $28.3 million subsidy will be restored in 2018.

Advertising, Charters and Concessions

Advertising, charters and concessions revenue for 2018 is forecast to be $38.3 million. The bulk of this revenue is received through advertisement on buses and rail cars and in rail stations. This forecast also includes: concession revenue from 91 concessions within the CTA's 145 rail stations, revenue generated from billboards, and revenue from Special Contract Guarantees. The contract revenue includes agreements for transportation services for the University of Chicago and other employers.

Investment Income

The 2018 budget for investment income is $1.6 million.

The variation in interest rates from 2007 to 2018 is attributed to significant changes since the Great Recession of 2008. The Federal Funds Rates has increased within the last few years, but has not reached pre-recession levels. The Federal Funds Rate has increased from near zero at the end of 2008 to 1.25 as of September 2017.

The Federal Open Market Committee (FOMC) is expected to modestly raise short term rates once more in the fourth quarter of 2017 from 1.25 to 1.50, and two more times during 2018 from a range of 1.50-2.00, with the yield curve flattening gradually.

[Table of Investment Income Levels 2007 – 2018 Budget]

Year	Investment Income (in millions)	Federal Funds Rate (at year end)
2007	$12.1	2.50
2008	$3.8	0-0.25
2009	$1.3	0.10
2010	$0.6	0.20
2011	$0.6	0.06
2012	$0.7	0.16
2013	$0.4	0.08
2014	$0.4	0.12
2015	$1.1	0.35
2016	$1.6	0.50-0.75
2017 Forecast	$2.1	1.25-1.50
2018 Budget	$1.6	1.50-2.00

Statutory Required Contributions

The RTA Act requires the City of Chicago and Cook County to annually contribute $3 million and $2 million, respectively, towards CTA operations.

[Table: Statutory Contributions by City and Country]

Statutory Required Contributions (in millions)	2018
Contributions –City of Chicago	$3.0
Contributions – Cook County	$2.0
Total	$5.0

All Other Revenue

The CTA forecasts $51.2 million in other revenue for 2018. Revenues in this category include safety and security grants, parking fees, rental revenue, third-party contractor reimbursements and filming fees. The CTA has 43 real estate leases across the system, as well as leases within the CTA headquarters building. Parking revenues include Park & Ride Facilities (17 facilities with approximately 6,200 spaces), under 'L' parking rentals and long-term parking agreements.

In 2018, a new source of revenue is included in the other revenue category. The City of Chicago 2018 budget proposed a $0.15 increase in the ride-hailing fee to fund capital improvements on the CTA system. The CTA will leverage this new funding source for security camera upgrades and capital improvements to modernize the rail system, including extensive upgrades to track and signal infrastructure on the Pink, Green, Brown, Blue and Red Lines.

Public Funding

Most of the CTA's public funding for operating and capital needs is funneled through the RTA. Under the RTA Act, as amended in 2008, some of the funds are allocated to the Service Boards based on a set formula; other funds are allocated based on the RTA's discretion. The sources and allocations are outlined below.

Sales Tax Revenue per 1983 Formula

RTA Sales Tax is the primary source of operating revenue for the RTA and the three Service Boards. The tax is authorized by Illinois statute, imposed by the RTA in the six-county region of northeastern Illinois and collected by the state. The sales tax is the equivalent of one percent on sales in the City of Chicago, one percent on sales in Cook County, and 0.25 percent on sales in the collar counties of DuPage, Kane, Lake, McHenry and Will. The one percent sales tax in Cook County is comprised of one percent on food and drugs and 0.75 percent from all other sales, with the state then providing a "replacement" amount to the RTA equivalent to 0.25 percent of all other sales. Proceeds from the RTA Sales Tax are distributed to the CTA, Metra, and Pace, primarily to fund operating costs not recovered through the farebox. The RTA retains 15 percent of the total sales tax and passes the remaining 85 percent to the Service Boards according to the Operating Funding Allocation Chart found later in this section.

The State budget passed in July 2017 includes a 2 percent surcharge levied on sales tax receipts, reducing RTA public funding going forward.

[Table: Sales Tax Revenue Percentage Allocation by Transit Agency]

	Chicago Sales Tax Revenue	Suburban Cook Sales Tax Revenue	Collar County Sales Tax Revenue
CTA	100%	30%	0%
Metra	0%	55%	70%
Pace	0%	15%	30%
Total:	**100%**	**100%**	**100%**

The 2018 Sales Tax Budget per the 1983 Formula for the Region is estimated to be $ $933.6 million. After state surcharge of 2 percent, the remaining amount of $914.9 million is distributed to the RTA and three Service Boards as follows:

[Table: Sales Tax Revenue Dollar Allocation by Transit Agency]

(in thousands)	Chicago Sales Tax	Suburban Cook Sales Tax	Collar County Sales Tax	Total
CTA	$263,856	$117,368	$0	$381,224
Metra	$0	$215,174	$85,825	$301,000
Pace	$0	$58,684	$36,782	$95,466
RTA	$46,563	$69,040	$21,637	$137,239
Total	$310,419	$460,266	$144,244	$914,929

* *Totals may not add due to rounding.*

In addition, the RTA will distribute at its discretion any funds remaining from the initial allocation of the 15 percent sales tax distribution that are in excess of the RTA's funding needs.

Public Transportation Fund

As authorized by the RTA Act, the Illinois State Treasurer transfers from the State General Revenue Fund an amount equal to 25 percent of the RTA sales tax collections (or gasoline or parking taxes, if imposed by the RTA). The treasurer transfers this amount to a special fund, the Public Transportation Fund (PTF), and then remits it to the RTA on a monthly basis. This fund is a continuing appropriation to the RTA. 2018 appropriations cut PTF funds by 10 percent for one year. The RTA uses these funds at its discretion to fund the needs of the Service Boards, RTA operations, debt service and capital investment.

State Assistance

The RTA Act provides supplemental state funding in the forms of additional state assistance and additional financial assistance (collectively, "State Assistance") to the RTA in connection with its issuance of Strategic Capital Improvement Program (SCIP) bonds. The funding equals debt service amounts paid to bondholders of the SCIP bonds issued by the RTA, plus any debt service savings from the issuance of refunding or advanced refunding SCIP bonds, less the amount of interest earned by the RTA on the proceeds of SCIP bonds. The RTA Act limits the amount of State Assistance available to the RTA to the lesser of the debt service or $55 million. Remittance requires an annual appropriation made by the State of Illinois.

2008 Legislation

The 2008 state funding package increased the percentage of state sales tax dedicated to mass transit and gave authority to the City of Chicago to increase the Real Estate Transfer Tax (RETT) to support the CTA. In addition, the legislation also provided for long-term pension reforms that will increase the funded ratio of the CTA's pension to 90 percent by 2059.

Innovation, Coordination, and Enhancement (ICE) Program

The ICE program is an RTA funding program established as part of the 2008 Mass Transit Reform Legislation. The RTA program provides operating and capital assistance to enhance the coordination and integration of public transportation and to develop and implement innovations to improve the quality and delivery of public transportation. Projects funded through this program advance the vision and goals of the RTA Act by providing reliable and convenient transit services and enhancing efficiencies through effective management, innovation, and technology. CTA plans to utilize all ICE funds in 2018 toward operating costs.

2018 RTA Proposed Service Board Operations Funding (in thousands)
[Table: Service Board Funding 2018]

2018 Service Board Funding	RTA	CTA	Metra	Pace - Mainline	Pace - Paratransit	Total
Sales Tax (1983 Formula)	$353,135	$ 381,224	$301,000	$95,466		$1,130,824
Sales Tax and PTF (PA 95-0708)		$124,792	$101,394	$33,798	$158,970	$418,953
CTA - RTA Non-Statutory	$(211,577)	$211,577				
Real Estate Transfer Tax (25% PTF)		$16,658				$16,658
RTA Suburban Community Mobility Funds				$25,154		$25,154
RTA South Suburban Job Access Fund	$(7,500)			$7,500		
Joint Self-Insurance Fund Reserve			$2,500			
Pace - RTA Non-Statutory	$(4,318)			$4,318		
State Funding for ADA						
RTA Agency Revenue	$ 6,309					$6,309
State Financial Assistance (ASA/AFA)	$130,283					
Total RTA Funds	$266,332	$734,251	$404,893	$166,236	$158,970	$1,730,681
Real Estate Transfer Tax (City of Chicago)		$66,631				$66,631
Total Funds	$266,332	$800,882	$404,893	$166,236	$158,970	$1,797,312
ICE Funding/State ADA funding		$6,037	$5,895	$1,635	$8,500	$22,067
State Reduced Fare Reimbursement		$28,322	$3,138	$2,610		$34,070
Total Regional Public Funds	$266,332	$835,241	$413,926	$170,481	$167,470	$1,853,449

* *Totals may not add due to rounding.*

[Flow chart: Operating Funding Allocation under the 1983 Formula and 2008 Legislation]

[Table: Transit Agency 2018 funding and percentages]
($ in thousands)

Transit Agency	Funding	Percentage
CTA	$800,882	44.6%
Metra	$404,893	22.5%
Pace-Mainline	$166,236	9.2%
Pace-Paratransit	$158,970	8.8%
RTA	$266,332	14.8%
Total	$1,797,312	100.0%

Note: Percentages may not add due to rounding

[Table 2018 ICE and ADA funding by Agency]
($ in thousands)

2018 ICE Funding and ADA Funding	CTA	Metra	Pace	ADA
2018 ICE	$6,037	$5,895	$1,635	
State ADA Funding				$8,500
Total	$6,037	$5,895	$1,635	$8,500

Federal Assistance (Federal Transit Administration)

The RTA is the region's designated recipient of federal assistance, which previously included both operating and capital funds. The FTA eliminated operating assistance for the RTA in 1998.

Fund Balance - Unrestricted Net Position

The CTA is required under Section 4.01 of the RTA Act to submit for approval an annual budget to the RTA by November 15th of each year. The budget must balance with regard to anticipated revenues from all sources, including operating subsidies, costs of providing services, and funding operating deficits.

In addition to a structurally balanced budget, as part of the 2018 Budget and as recommended by the Government Finance Officers Association (GFOA), the CTA is reporting on its fund balance or unrestricted net assets or position of governmental funds.

Fund balance represents a portion of net assets that is neither restricted nor invested in capital assets net of related debt. The unrestricted net position represents the accumulation of operating costs not eligible for reimbursement under the RTA agreement. These costs include, but are not limited to, provision for injuries and damages in excess of (or under) budget, depreciation expense, pension expense in excess of pension contributions, actuarial adjustments, interest expense, and capital contributions.

2014–2020 Fund Balance – Unrestricted Net Position (Dollars in thousands)

	Actual 2014	Actual 2015	Actual 2016	Forecast 2017	2018 Budget	2019 Plan	2020 Plan
Total Operating Expenses	$1,399,913	$1,444,126	$1,464,142	$1,467,213	$1,514,495	$1,576,389	$1,613,533
Total System Generated Revenue	$680,675	$675,518	$676,569	$650,697	$707,576	$723,687	$736,359
Funding Requirement	$719,238	$768,608	$787,573	$816,517	$806,919	$852,702	$877,175
Public Funding	$739,238	$739,008	$809,748	$799,016	$806,919	$852,702	$877,175
Short-term Borrowing	$0	$0	$0	$17,500	$0	$0	$0
Net Funding Available (PBV)	$20,000	$24,400	$22,175	$0	$0	$0	$0
Fund Balance - unrestricted net position:							
Beginning Balance	-$1,906,470	-$1,949,268	-$3,118,990	-$3,157,858	-$3,180,245	-$3,190,192	-$3,195,284
Net operating results (PBV)	$20,000	$24,400	$22,175	$0	$0	$0	$0
Less other obligations*	-$38,966	-$1,180,325	-$35,578	$0	$0	$0	$0
Less capital expended from net position (PBV)**	-$23,832	-$13,797	-$25,465	-$22,387	-$9,947	-$5,092	-$798
Ending Balance	-$1,949,268	-$3,118,990	-$3,157,858	-$3,180,245	-$3,190,192	-$3,195,284	-$3,196,082

**Implementation of GASB 68 resulted in $1.2 billion reduction in unrestricted net position (FY2015)*
***Includes expenditures from prior years' positive budget variance*

Debt Management Policy Guidelines

On October 14, 2004, the Chicago Transit Board approved an ordinance adopting Debt Management Policy Guidelines (the "Debt Policy") which is currently being updated. The Debt Policy serves as a management tool to ensure that the CTA identifies transactions that utilize debt in the most efficient manner, and provides for full and timely repayment of all borrowings. Additionally, the Debt Policy outlines a means of achieving the lowest possible cost of capital within prudent risk parameters as well as ensuring ongoing access to the capital markets. The Debt Policy applies to all short- and long-term bonds and notes, other long-term lease obligations, and interest rate exchange agreements (e.g., debt related derivatives). The Debt Policy does not cover commodity hedging, leveraged leases, long-term operating leases, short-term leases and bank obligation transactions. The general debt issuance guidelines outlined in the Debt Policy are summarized below.

The Debt Policy

It is the CTA's preference to use a pay-as-you-go funding mechanism for all capital projects. As such, CTA explores the use of available cash to fund all or part of a particular capital improvement project and other long-term financial needs before proposing the use of debt. However, the CTA recognizes that the size, scope and timing of particular projects in its capital improvement plan, cash flow sufficiency and capital market opportunities may necessitate the use of debt. The Debt Policy allows for the issuance of either long-term or short-term debt. The financing purpose determines the type of debt the CTA would use.

Short-Term Debt Obligations

Short-term debt may be used by the CTA as a cash management tool to provide interim financing or to bridge temporary cash flow deficits within a fiscal year. Currently, the CTA has no outstanding short-term debt obligations, but expects to issue approximately $17.5 million of such notes in December 2017.

Long-Term Debt Obligations

The Debt Policy prohibits the use of long-term debt to fund operations. However, long-term bonds are deemed appropriate to finance essential capital activities and certain management initiatives. The CTA may also use long-term lease obligations to finance or refinance capital equipment. Prior to entering into any lease financing, the Authority will evaluate three factors: the useful life of assets financed, the terms and conditions of the lease, and the budgetary, debt capacity and tax implications.

Other Provisions

The CTA may secure credit enhancement in the form of municipal bond insurance or a letter/line of credit for all or a portion of each bond issue. The Debt Policy also allows the Authority to issue debt on either a taxable or tax-exempt basis and to use interest rate exchange agreements when such agreements will reduce the expected interest rate costs, hedge fluctuations in interest rates, or gain efficiency in structuring and restructuring debt.

Debt Limitations

Attaining a proper balance between minimizing borrowing and maximizing financial flexibility is a key goal of the CTA debt program. The CTA is not subject to statutory debt limitations for capital investment.

However, the Debt Policy does limit the aggregate amount of the CTA's un-hedged, long-term variable rate debt to a maximum of 20 percent of all outstanding long-term debt obligations.

Current Debt

CTA's current long-term debt (principal) obligations as of September 2, 2017, include sales tax and transfer tax revenue bonds, capital grant receipts revenue bonds, TIFIA loans, building revenue bonds, and capital lease obligations as described below.

[Table: CTA Debt Obligations]

CTA Debt Obligations									
Credit	**Series Name**	**Outstanding Principal as of September 2, 2017**	**Final Maturity**	**Debt Service Budget Payment**	**Security Pledge**	**Moody's Rating (Outlook)**	**S&P Rating (Outlook)**	**Kroll Rating (Outlook)**	**Fitch Rating (Outlook)**
Sales Tax	Series 2008A and 2008B ("POBs")	$1,814,785,000	2040	Operating	Sales Tax & Transfer Tax	A3(neg)	AA(stable)	AA(stable)	NR
	Series 2010A and 2010B	536,610,000	2040	Capital	Sales Tax	A3(neg)	AA(stable)	AA(stable)	NR
	Series 2011	476,905,000	2040	Capital	Sales Tax	A3(neg)	AA(stable)	AA(stable)	NR
	Series 2014	555,000,000	2049	Operating	Sales Tax	NR	AA(stable)	AA(stable)	NR
	Series 2017 (Second Lien)	296,220,000	2051	Operating	Second Lien Sales Tax	NR	A+(stable)	AA-(stable)	NR
	Total Principal Outstanding	**$3,679,520,000**							
GARVEE	2010 5307	$63,895,000	2028	Capital	FTA 5307 Grant Receipts	A3(stable)	A(stable)	NR	BBB(stable)
	2011 5307	56,525,000	2029	Capital	FTA 5307 Grant Receipts	A3(stable)	A(stable)	NR	BBB(stable)
	2015 5307	131,270,000	2026	Capital	FTA 5307 Grant Receipts	NR	A(stable)	NR	BBB(stable)
	2017 5307	90,540,000	2026	Capital	FTA 5307 Grant Receipts	NR	A(stable)	NR	BBB(stable)
	2008A 5309/5337	9,935,000	2018	Capital	FTA 5309/5337 Grant Receipts	A3(stable)	A+(stable)	NR	BBB(stable)
	2008 5309/5337	8,490,000	2018	Capital	FTA 5309/5337 Grant Receipts	A3(stable)	A+(stable)	NR	BBB(stable)
	2010 5309/5337	26,820,000	2028	Capital	FTA 5309/5337 Grant Receipts	A3(stable)	A+(stable)	NR	BBB(stable)
	2015 5337/5337	45,650,000	2026	Capital	FTA 5309/5337 Grant Receipts	NR	A+(stable)	NR	BBB(stable)
	2017 5337 / 5337	135,255,000	2026	Capital	FTA 5309/5337 Grant Receipts	NR	A+(stable)	NR	BBB(stable)
	Total Principal Outstanding	**$568,380,000**							
Capital Leases	2008 (Oct 2013 Ref) Artics Hybrid Bus Lease (PNC)	$37,801,135	2020	Capital	CTA Lease Payments	NR	NR	NR	NR
	2008 COPs (April 2013 Ref) Flyer Bus Lease (BONY)	26,228,462	2020	Capital	CTA Lease Payments	NR	NR	NR	NR
	2006 PBC Bonds	67,095,000	2033	Capital	CTA Lease Payments	Baa1(stable)	A+(stable)	NR	NR
	Total Principal Outstanding	**$131,124,597**							
TIFIA	95th Street Terminal (2014)	$79,200,000	2050	Operating	CTA Farebox Revenue	NR	A+ (stable)	NR	NR
	Your New Blue (2015)	120,000,000	2052	Operating	CTA Farebox Revenue	NR	A+ (stable)	AA- (stable)	NR
	Railcars (2016)	254,900,000	2056	Operating	CTA Farebox Revenue	NR	A+ (stable)	AA- (stable)	NR
	Total TIFIA Loans	**$454,100,000**							
	Total Principal Outstanding (all issues)	**$4,833,124,597**							

NR – Not Rated; Neg – Negative

[Graph: Total CTA Annual Debt Service Obligations]

[Picture: Stacked Bar Graph of Total CTA Annual Debt Service Obligations. In $]

PAYMENT YEAR	Operating Sales Tax ('08+'14+'17)	Capital Leases	Capital (FTA) Bonds	Capital Sales Tax ('10+'11)
2017	185,170,657	10,498,563	0	67,209,238
2018	185,169,732	27,186,095	72,673,958	67,212,488
2019	199,880,972	27,184,039	76,186,075	67,214,038
2020	199,884,187	20,641,826	74,930,275	67,273,288
2021	199,881,557	6,190,163	83,174,275	81,364,731
2022	199,884,262	6,189,788	62,672,775	81,363,872
2023	199,883,183	6,186,456	62,671,025	81,365,808
2024	199,882,374	6,189,175	62,670,225	81,366,705
2025	199,882,348	6,186,525	62,670,263	81,368,418
2026	199,882,581	6,187,981	62,666,650	81,363,708
2027	199,881,517	6,187,888	49,765,750	81,364,398
2028	199,881,562	6,185,719	49,758,000	81,369,190
2029	199,878,745	6,190,688	20,975,000	81,366,430
2030	199,883,058	6,187,138		81,364,773
2031	199,882,424	6,189,413		81,367,038
2032	199,884,078	6,186,725		81,365,425
2033	199,883,182	6,188,288		81,367,088
2034	199,878,520	0		87,558,343
2035	199,882,152	0		87,556,465
2036	199,883,376	0		87,552,158
2037	199,885,112	0		87,548,995
2038	199,877,866	0		87,559,765
2039	199,880,418	0		87,555,705
2040	199,882,753	0		87,553,983
2041	114,397,788	0		0
2042	114,403,388	0		0
2043	114,402,288	0		0
2044	114,401,088	0		0
2045	114,400,538	0		0
2046	114,398,450	0		0
2047	114,396,563	0		0
2048	114,403,900	0		0
2049	114,399,863	0		0
2050	35,621,750	0		0
2051	35,621,250	0		0

Sales Tax Revenue Bonds

Sales Tax Revenue Bonds are long-term debt obligations secured by a portion of sales tax revenues. The Sales Tax Receipts consist of all amounts received by the CTA from the RTA, representing the CTA's share of (i) RTA Sales Taxes imposed through the Northeastern Illinois Transit Region, which includes the Counties of Cook, DuPage, Kane, Lake, McHenry and Will, (ii) Replacement Revenues paid to the RTA by the State and (iii) Public Transportation Fund Revenues paid to or on behalf of the RTA by the State. The sales tax pledge for the 2010, 2011, and 2014 Series is parity to the sales tax pledge for the 2008 Series. The sales tax pledge for the 2017 Series is subordinate to the sales tax pledge for the 2008, 2010, 2011, and 2014 Series. The 2008 Sales Tax Bonds (POB's) are also secured by Transfer Tax Receipts which are

a portion of real estate tax revenue remitted by the City directly to the CTA pursuant to the Intergovernmental Agreement. Transfer Tax Receipts do not secure the 2010, 2011, 2014, and 2017 Series Bonds.

Sales and Transfer Tax Receipts Revenue Bonds, 2008A Series (Pension Funding) and 2008B Series (Retiree Health Care Funding)

On August 6, 2008, the CTA issued Sales and Transfer Tax Receipts Revenue Bonds in the amount of $1.94 billion to fund the employee retirement plan and to create a retiree health care trust. The bonds were sold in two tranches: a $1.3 billion Series A to fund the employee retirement plan, and a $640 million Series B to fund a permanent trust that was established to cover other post-employment benefits for retiree health care. The bonds are secured primarily by a pledge of and lien on the Sales Tax Receipts Fund and the Transfer Tax Receipts Fund deposits. The bonds were issued pursuant to the pension and retiree health care reform requirements set forth in Public Acts 94-839 and 95-0708.

Public Act 94-839 required the CTA to make contributions to its retirement system in an amount which, together with the contributions of its participants, interest earned on investments and other income, was sufficient to bring the total assets of the retirement system up to 90 percent of its total actuarial liabilities by the end of fiscal year 2058. Additionally, Public Act 94-839 required that the Retirement Plan's pension and retiree health care programs be separated into two distinct trusts by December 31, 2008.

Under amendments to the Pension Code adopted by the Illinois General Assembly in 2008, the funding of the Retirement Plan is also subject to the following requirements:

- For each year through 2039, the estimated "funded ratio" of the Retirement Plan, which is the actuarial value of assets divided by the actuarial accrued liability, expressed as a percentage, must be at least 60 percent. If the funded ratio is projected to decline below 60 percent in any year before 2040, increased contributions will be required each year as a level percentage of payroll over the years remaining until 2040 so that the funded ratio does not decline below 60 percent.

- If the funded ratio actually declines below 60 percent in any year prior to 2040, increased contributions will be required each year as a level percentage of payroll during the years after the then current year so that the funded ratio is projected to reach at least 60 percent no later than 10 years after the then current year.

- Beginning in 2040, the minimum annual contribution to the Retirement Plan must be sufficient to bring the funded ratio to 90 percent by the end of 2059.

- Beginning in 2060, the minimum contribution must be an amount necessary to maintain the funded ratio at 90 percent.

- Two-thirds of any increase in required contributions is to be paid by the Authority and one-third by participating employees.

Any deviation from the stated projections could result in a directive from the State of Illinois Auditor General to increase the CTA and employee contributions.

Public Act 95-708 authorized the CTA to issue $1.9 billion in pension obligation bonds to fund the pension and retiree health care and provided that the CTA will have no future responsibility for retiree healthcare costs after the bond funding. In accordance with Public Act 95-708, all retiree healthcare

benefits were to be paid from the newly established Retiree Health Care Trust no earlier than January 1, 2009 but no later than July 1, 2009.
The Series 2008A and 2008B bonds are taxable bonds and bear interest ranging from 5.1 percent to 6.9 percent. Scheduled interest on the 2008A and 2008B bonds was funded through June 1, 2009 and June 1, 2010, respectively, with bond proceeds and interest earnings thereon. Interest is payable semi-annually on June 1 and December 1 and the bonds mature serially on December 1, 2013 through December 1, 2040. The debt service obligations are paid by operating funds.

Sales Tax Receipts Revenue Bonds, Series 2010A and Taxable Series 2010B (Build America Bonds)

On April 6, 2010, the CTA issued Sales Tax Receipts Revenue Bond Series 2010A and Taxable Series 2010B (Build America Bonds) in the amount of $550 million to fund or reimburse the Authority for prior expenditures of the "2010 Project," capitalize a portion of interest on the bonds, fund a portion of the consolidated debt service reserve fund on the bonds, and to pay costs of issuance on the bonds. The Series 2010B Bonds were issued as bonds designated as "Build America Bonds" under the provisions of the American Recovery and Reinvestment Act of 2009. The 2010 Project means, collectively, capital improvements to the transportation system and specifically the purchase of rail cars, rail car overhaul and rehabilitation, and the replacement and upgrade of rail track and structure.

The Series 2010A bonds bear interest ranging from 4.0 percent to 5.0 percent with interest payable semi-annually on June 1 and December 1, commencing December 1, 2010. The Series 2010A bonds mature serially on December 1, 2015 through December 1, 2019. The Taxable Series 2010B bonds bear interest ranging from 5.07 percent to 6.20 percent with interest payable semi-annually on June 1 and December 1, commencing December 1, 2010. Further, CTA pays 35 percent of the Build America Bond interest directly from a federal subsidy CTA receives from the federal government. The Taxable Series 2010B bonds mature annually each December 1, 2020 through December 1, 2040. The debt service obligations are paid by capital funds.

2011 Sales Tax Receipts Revenue Bonds

On November 4, 2011, the CTA issued the Sales Tax Receipts Revenue Bonds, Series 2011, in the amount of $476,905,000. The bonds were issued to pay for, or reimburse the CTA for prior expenditures relating to (i) the purchase of rail cars to replace existing cars and (ii) the finance of any other capital project designated by the CTA Board as part of the 2011 project.

The Series 2011 bonds bear interest ranging from 5.0 percent to 5.25 percent. Interest is payable semiannually on June 1 and December 1 and the bonds mature annually on December 1, 2021 through December 1, 2040. The debt service obligations are paid by capital funds.

2014 Sales Tax Receipts Revenue Bonds

On July 10, 2014, CTA issued the Sales Tax Receipts Revenue Bonds, Series 2014, in the amount of $555,000,000, along with a premium of $45,153,612. The bonds were issued to pay for (i) the purchase of rail cars to replace existing cars and (ii) the finance of any other capital project designated by the CTA Board as part of the 2014 project. The Series 2014 bonds bear interest ranging from 5 percent to 5.25 percent. Scheduled interest on the 2014 bonds was funded through June 1, 2016 with proceeds of the 2014 bonds and interest thereon. Interest is payable semiannually on June 1 and December 1 and the bonds mature annually on December 1, 2041 through December 1, 2049. The debt service obligations are paid by operating funds.

2017 Sales Tax Receipts Subordinate Revenue Bonds

On January 24, 2017, CTA issued the Sales Tax Receipts Subordinate Revenue Bonds, Series 2017, in the amount of $296,220,000, and are subordinate to the Sales Tax Bonds: Series 2008 A&B, Series 2010 A&B, Series 2011, and Series 2014. The bonds were issued to pay for projects included in the Capital Improvement Plan. The Series 2017 bonds bear interest ranging from 4 percent to 5 percent. Scheduled interest on the 2017 bonds was funded through December 1, 2018 with proceeds of the 2017 bonds and interest thereon. Interest is payable semiannually on June 1 and December 1 and the bonds mature annually on December 1, 2041 through December 1, 2051. The debt service obligations are paid by operating funds.

[Picture: Stacked Bar Graph: Sales Tax Receipts Revenue Bonds Debt Service. In $]

	TOTAL ST PRINCIPAL ($)	TOTAL ST INTEREST ($)	TOTAL ST DEBT SERVICED ($)
PAYMENT YEAR			
2017	42,400,000	209,979,895	252,379,895
2018	44,935,000	207,447,220	252,382,220
2019	47,610,000	219,485,010	267,095,010
2020	50,520,000	216,637,475	267,157,475
2021	67,650,000	213,596,288	281,246,288
2022	71,600,000	209,648,134	281,248,134
2023	76,065,000	205,183,991	281,248,991
2024	80,865,000	200,384,078	281,249,078
2025	85,995,000	195,255,765	281,250,765
2026	91,535,000	189,711,288	281,246,288
2027	97,440,000	183,805,914	281,245,914
2028	103,735,000	177,515,752	281,250,752
2029	110,430,000	170,815,175	281,245,175
2030	117,570,000	163,677,830	281,247,830
2031	125,175,000	156,074,462	281,249,462
2032	133,275,000	147,974,503	281,249,503
2033	141,905,000	139,345,269	281,250,269
2034	157,285,000	130,151,863	287,436,863
2035	167,465,000	119,973,617	287,438,617
2036	178,305,000	109,130,533	287,435,533
2037	189,855,000	97,579,107	287,434,107
2038	202,165,000	85,272,631	287,437,631
2039	215,275,000	72,161,123	287,436,123
2040	229,245,000	58,191,736	287,436,736
2041	71,090,000	43,307,788	114,397,788
2042	74,635,000	39,768,388	114,403,388
2043	78,350,000	36,052,288	114,402,288
2044	82,250,000	32,151,088	114,401,088
2045	86,345,000	28,055,538	114,400,538
2046	90,795,000	23,603,450	114,398,450
2047	95,475,000	18,921,563	114,396,563
2048	100,425,000	13,978,900	114,403,900
2049	105,620,000	8,779,863	114,399,863
2050	32,310,000	3,311,750	35,621,750
2051	33,925,000	1,696,250	35,621,250

[Table: Schedule I Sales Tax and Transfer Receipts Revenue Bonds Series 2008A and 2008B Total Debt Service 2017-2040]

SCHEDULE I: $1,936,855,000 Sales and Transfer Tax Receipts Revenue Bonds (Public Acts 94-839 and 95-0708) Series 2008A and 2008B Total Debt Service 2017-2040				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$1,814,785,000
2017	$32,475,000	$124,098,869	$156,573,869	1,782,310,000
2018	34,520,000	122,052,944	156,572,944	1,747,790,000
2019	36,695,000	119,878,184	156,573,184	1,711,095,000
2020	39,010,000	117,566,399	156,576,399	1,672,085,000
2021	41,465,000	115,108,769	156,573,769	1,630,620,000
2022	44,080,000	112,496,474	156,576,474	1,586,540,000
2023	47,120,000	109,455,395	156,575,395	1,539,420,000
2024	50,370,000	106,204,586	156,574,586	1,489,050,000
2025	53,845,000	102,729,560	156,574,560	1,435,205,000
2026	57,560,000	99,014,793	156,574,793	1,377,645,000
2027	61,530,000	95,043,729	156,573,729	1,316,115,000
2028	65,775,000	90,798,774	156,573,774	1,250,340,000
2029	70,310,000	86,260,957	156,570,957	1,180,030,000
2030	75,165,000	81,410,270	156,575,270	1,104,865,000
2031	80,350,000	76,224,636	156,574,636	1,024,515,000
2032	85,895,000	70,681,290	156,576,290	938,620,000
2033	91,820,000	64,755,394	156,575,394	846,800,000
2034	98,150,000	58,420,732	156,570,732	748,650,000
2035	104,925,000	51,649,364	156,574,364	643,725,000
2036	112,165,000	44,410,588	156,575,588	531,560,000
2037	119,905,000	36,672,324	156,577,324	411,655,000
2038	128,170,000	28,400,078	156,570,078	283,485,000
2039	137,015,000	19,557,630	156,572,630	146,470,000
2040	146,470,000	10,104,965	156,574,965	-
Total:	**$1,814,785,000**	**$1,942,996,701**	**$3,757,781,701**	

[Table: Schedule II Sales Tax Receipts Revenue Bonds Series 2010A and 2010B Total Debt Service 2017-2040]

SCHEDULE II: $550,000,000 Sales Tax Receipts Revenue Bonds Series 2010A and 2010B Total Debt Service 2017-2040				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$536,610,000
2017	$9,925,000	$32,318,951	$42,243,951	526,685,000
2018	10,415,000	31,832,201	42,247,201	516,270,000
2019	10,915,000	31,333,751	42,248,751	505,355,000
2020	11,510,000	30,798,001	42,308,001	493,845,000
2021	12,095,000	30,214,444	42,309,444	481,750,000
2022	12,720,000	29,583,085	42,303,085	469,030,000
2023	13,405,000	28,900,021	42,305,021	455,625,000
2024	14,135,000	28,166,767	42,301,767	441,490,000
2025	14,930,000	27,372,380	42,302,380	426,560,000
2026	15,855,000	26,446,720	42,301,720	410,705,000
2027	16,835,000	25,463,710	42,298,710	393,870,000
2028	17,880,000	24,419,940	42,299,940	375,990,000
2029	18,985,000	23,311,380	42,296,380	357,005,000
2030	20,155,000	22,134,310	42,289,310	336,850,000
2031	21,400,000	20,884,700	42,284,700	315,450,000
2032	22,725,000	19,557,900	42,282,900	292,725,000
2033	24,135,000	18,148,950	42,283,950	268,590,000
2034	31,820,000	16,652,580	48,472,580	236,770,000
2035	33,785,000	14,679,740	48,464,740	202,985,000
2036	35,875,000	12,585,070	48,460,070	167,110,000
2037	38,090,000	10,360,820	48,450,820	129,020,000
2038	40,455,000	7,999,240	48,454,240	88,565,000
2039	42,955,000	5,491,030	48,446,030	45,610,000
2040	45,610,000	2,827,820	48,437,820	-
Total:	**$536,610,000**	**$521,483,508**	**$1,058,093,508**	

[Table: Schedule III Sales Tax Receipts Revenue Bonds Series 2011 Total Debt Service 2017-2040]

SCHEDULE III: $476,905,000 Sales Tax Receipts Revenue Bonds Series 2011 Total Debt Service 2017-2040				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$476,905,000
2017	$-	$24,965,288	$24,965,288	476,905,000
2018	-	24,965,288	24,965,288	476,905,000
2019	-	24,965,288	24,965,288	476,905,000
2020	-	24,965,288	24,965,288	476,905,000
2021	14,090,000	24,965,288	39,055,288	462,815,000
2022	14,800,000	24,260,788	39,060,788	448,015,000
2023	15,540,000	23,520,788	39,060,788	432,475,000
2024	16,360,000	22,704,938	39,064,938	416,115,000
2025	17,220,000	21,846,038	39,066,038	398,895,000
2026	18,120,000	20,941,988	39,061,988	380,775,000
2027	19,075,000	19,990,688	39,065,688	361,700,000
2028	20,080,000	18,989,250	39,069,250	341,620,000
2029	21,135,000	17,935,050	39,070,050	320,485,000
2030	22,250,000	16,825,463	39,075,463	298,235,000
2031	23,425,000	15,657,338	39,082,338	274,810,000
2032	24,655,000	14,427,525	39,082,525	250,155,000
2033	25,950,000	13,133,138	39,083,138	224,205,000
2034	27,315,000	11,770,763	39,085,763	196,890,000
2035	28,755,000	10,336,725	39,091,725	168,135,000
2036	30,265,000	8,827,088	39,092,088	137,870,000
2037	31,860,000	7,238,175	39,098,175	106,010,000
2038	33,540,000	5,565,525	39,105,525	72,470,000
2039	35,305,000	3,804,675	39,109,675	37,165,000
2040	37,165,000	1,951,163	39,116,163	-
Total:	**$476,905,000**	**$404,553,538**	**$881,458,538**	

[Table: Schedule IV Sales Tax Receipts Revenue Bonds Series 2014 Total Debt Service 2017-2049]

SCHEDULE IV: $555,000,000 Sales Tax Receipts Revenue Bonds Series 2014 Total Debt Service 2017-2049				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$555,000,000
2017	$-	$28,596,788	$28,596,788	555,000,000
2018	-	28,596,788	28,596,788	555,000,000
2019	-	28,596,788	28,596,788	555,000,000
2020	-	28,596,788	28,596,788	555,000,000
2021	-	28,596,788	28,596,788	555,000,000
2022	-	28,596,788	28,596,788	555,000,000
2023	-	28,596,788	28,596,788	555,000,000
2024	-	28,596,788	28,596,788	555,000,000
2025	-	28,596,788	28,596,788	555,000,000
2026	-	28,596,788	28,596,788	555,000,000
2027	-	28,596,788	28,596,788	555,000,000
2028	-	28,596,788	28,596,788	555,000,000
2029	-	28,596,788	28,596,788	555,000,000
2030	-	28,596,788	28,596,788	555,000,000
2031	-	28,596,788	28,596,788	555,000,000
2032	-	28,596,788	28,596,788	555,000,000
2033	-	28,596,788	28,596,788	555,000,000
2034	-	28,596,788	28,596,788	555,000,000
2035	-	28,596,788	28,596,788	555,000,000
2036	-	28,596,788	28,596,788	555,000,000
2037	-	28,596,788	28,596,788	555,000,000
2038	-	28,596,788	28,596,788	555,000,000
2039	-	28,596,788	28,596,788	555,000,000
2040	-	28,596,788	28,596,788	555,000,000
2041	50,180,000	28,596,788	78,776,788	504,820,000
2042	52,690,000	26,087,788	78,777,788	452,130,000
2043	55,325,000	23,453,288	78,778,288	396,805,000
2044	58,090,000	20,687,038	78,777,038	338,715,000
2045	60,995,000	17,782,538	78,777,538	277,720,000
2046	64,195,000	14,580,300	78,775,300	213,525,000
2047	67,565,000	11,210,063	78,775,063	145,960,000
2048	71,115,000	7,662,900	78,777,900	74,845,000
2049	74,845,000	3,929,363	78,774,363	-
Total:	**$555,000,000**	**$840,312,978**	**$1,395,312,978**	

[Table: Schedule V: Sales Tax Receipts Revenue Bonds Subordinate Series 2017 Total Debt Service 2017-2051]

SCHEDULE V: $296,220,000 Sales Tax Receipts Revenue Bonds Subordinate Series 2017 Total Debt Service 2017-2051				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$296,220,000
2017	$-	$-	$-	296,220,000
2018	-	-	-	296,220,000
2019	-	14,711,000	14,711,000	296,220,000
2020	-	14,711,000	14,711,000	296,220,000
2021	-	14,711,000	14,711,000	296,220,000
2022	-	14,711,000	14,711,000	296,220,000
2023	-	14,711,000	14,711,000	296,220,000
2024	-	14,711,000	14,711,000	296,220,000
2025	-	14,711,000	14,711,000	296,220,000
2026	-	14,711,000	14,711,000	296,220,000
2027	-	14,711,000	14,711,000	296,220,000
2028	-	14,711,000	14,711,000	296,220,000
2029	-	14,711,000	14,711,000	296,220,000
2030	-	14,711,000	14,711,000	296,220,000
2031	-	14,711,000	14,711,000	296,220,000
2032	-	14,711,000	14,711,000	296,220,000
2033	-	14,711,000	14,711,000	296,220,000
2034	-	14,711,000	14,711,000	296,220,000
2035	-	14,711,000	14,711,000	296,220,000
2036	-	14,711,000	14,711,000	296,220,000
2037	-	14,711,000	14,711,000	296,220,000
2038	-	14,711,000	14,711,000	296,220,000
2039	-	14,711,000	14,711,000	296,220,000
2040	-	14,711,000	14,711,000	296,220,000
2041	20,910,000	14,711,000	35,621,000	275,310,000
2042	21,945,000	13,680,600	35,625,600	253,365,000
2043	23,025,000	12,599,000	35,624,000	230,340,000
2044	24,160,000	11,464,050	35,624,050	206,180,000
2045	25,350,000	10,273,000	35,623,000	180,830,000
2046	26,600,000	9,023,150	35,623,150	154,230,000
2047	27,910,000	7,711,500	35,621,500	126,320,000
2048	29,310,000	6,316,000	35,626,000	97,010,000
2049	30,775,000	4,850,500	35,625,500	66,235,000
2050	32,310,000	3,311,750	35,621,750	33,925,000
2051	33,925,000	1,696,250	35,621,250	-
Total:	**$296,220,000**	**$419,278,800**	**$715,498,800**	

Capital Grant Receipt Revenue Bonds-Section 5307 and Section 5337 (5309) Formula Funds

The Capital Grant Revenue Bonds are also known as "GARVEE bonds" (Grant Anticipation Revenue Vehicles). Federal Transit Administration Formula Funds from Section 5307 and Section 5309 secure the Capital Grant Revenue Bonds under Section 5307 and Section 5309, respectively. The passage of MAP-21 in 2012 replaced Section 5309 grants with Section 5337 grants. All debt service obligations are prefunded and paid by capital funds. Several series have been refunded, as summarized below, followed by details and uses per issue.

Refunding Series 2010 refunded the maturities dated June 1, 2010 through June 1, 2011 of the 5307 (Series 2004A, 2004B and 2006A) and 5309 (Series 2008 and 2008A) bonds.

Refunding Series 2011 refunded the maturity dated June 1, 2016 of the 5307 Series 2004B bonds and the maturities dated June 1, 2012 and June 1, 2016 through June 1, 2020 of the 5307 Series 2006A bonds.

Refunding Series 2015 5307 bonds refunded the maturity dated June 1, 2016 of the 5307 Series 2004B bonds and the maturities dated June 1, 2018 through June 1, 2021 of the 5307 Series 2006A bonds. Refunding Series 2015 5337 bonds refunded the maturities dated June 1, 2024 thru 2026 of the 5337 Series 2008A bonds.

Refunding Series 2017 5307 bonds refunded the Series 2008A 5307 bonds maturing June 1, 2022 through 2026. Refunding Series 2017 5337 bonds refunded the Series 2008 5337 bonds maturing June 1, 2019 through 2026 and the Series 2008A 5337 bonds maturing June 1, 2019 through 2023.

Capital Grant Receipts Revenue Bonds, Series 2008 (5309) and 2008A (5307)

On April 29, 2008, the CTA issued Capital Grant Receipts Revenue Bonds, Series 2008A (Federal Transit Administration Section 5307 Formula Funds) and Series 2008 (Federal Transit Administration Section 5309 Formula Funds) in the amount of $250 million, in anticipation of the receipt of grants from the federal government pursuant to a full-funding grant agreement. The bonds were issued to provide funds to finance or reimburse the CTA for expenditures relating to a portion of the costs of capital improvements to the Transportation System referred to as the "2008 Project." The Federal Transit Administration's section 5307 program is a formula grant program for metropolitan areas providing capital, operating or planning assistance for mass transportation. The section 5309 program is a formula grant program providing capital assistance for the modernization of existing rail systems.

The Series 2008 (5309) bonds bear interest ranging from 3.50 percent to 5.25 percent. Interest is payable semi-annually on June 1 and December 1 and the remaining bonds mature serially through June 1, 2018.

Capital Grant Receipts Revenue Bonds, Series 2008A (5309)

On November 26, 2008, the CTA issued Capital Grant Receipts Revenue Bonds, Series 2008A (Federal Transit Administration Section 5309 Formula Funds) in the amount of $175 million, in anticipation of the receipt of grants from the federal government pursuant to a full-funding grant agreement. The bonds were issued to provide funds to finance or reimburse the CTA for expenditures relating to a portion of the costs of capital improvements to the Transportation System referred to as the "2008 Project."

The Series 2008A (5309) bonds bear interest ranging from 5.0 percent to 6.0 percent. Interest is payable semi-annually on June 1 and December 1 and the remaining bonds mature serially through June 1, 2018.

Capital Grant Receipts Revenue Bonds, Refunding Series 2010 (5307) and Refunding Series 2010 (5309)

On May 19, 2010, the CTA issued Capital Grant Receipts Revenue Bonds, Refunding Series 2010 (Federal Transit Administration Section 5307 Formula Funds) (Federal Transit Administration Section 5309 Formula Funds), in the amount of $90.7 million, in anticipation of the receipt of grants from the federal government pursuant to a full-funding grant agreement. The bonds were issued to refund a portion of the outstanding 5307 and 5309 bonds and to pay costs of issuance.

The Refunding Series 2010 bonds bear interest of 5.0 percent. Interest is payable semi-annually on June 1 and December 1 and the bonds mature on June 1, 2027 and June 1, 2028.

Capital Grant Receipts Revenue Bonds, Refunding Series 2011 (5307)

On November 4, 2011, the CTA issued the tax-exempt Capital Grant Receipts Revenue Bonds backed by the pledge of Federal Transit Administration Section 5307 Urbanized Area Formula Program, in the amount of $56,525,000, in anticipation of the receipt of grants from the federal government pursuant to a full funding grant agreement. The bonds were issued to provide funds to refund a portion of the outstanding 5307 (Series 2004B and 2006A) bonds.

The Series 2011 bonds bear interest ranging from 4.5 percent to 5.25 percent. Interest is payable semiannually on June 1 and December 1, and the bonds mature serially from June 1, 2022 to June 1, 2029, except for years 2027 and 2028 when there is no principal amortization.

Capital Grant Receipts Revenue Bonds, Refunding Series 2015 (5307 and 5337)

On September 16, 2015, CTA issued the tax-exempt Capital Grant Receipts Revenue Bonds backed by the pledge of Federal Transit Administration Section 5307 Urbanized Area Formula Funds, and Section 5337 State of Good Repair Formula Funds in the total amount of $176,920,000, along with a premium of $21,568,633, in anticipation of the receipt of grants from the federal government pursuant to a full funding grant agreement. The bonds were issued to provide funds to refund a portion of the outstanding 5307 (Series 2004B and 2006A) and 5337 (Series 2008A) bonds.

The Series 2015 bonds bear interest of 5.0 percent. Interest is payable semiannually on June 1 and December 1, and the bonds mature serially from June 1, 2018 to June 1, 2026.

Capital Grant Receipts Revenue Bonds, Refunding Series 2017 (5307 and 5337)

On August 16, 2017, CTA issued the tax-exempt Capital Grant Receipts Revenue Bonds backed by the pledge of Federal Transit Administration Section 5307 Urbanized Area Formula Funds, and Section 5337 State of Good Repair Formula Funds in the total amount of $225,795,000, along with a premium of $31,278,763 in anticipation of the receipt of grants from the federal government pursuant to a full funding grant agreement. The bonds were issued to provide funds refunding the Series 2008A 5307 bonds maturing June 1, 2022 through 2026 as well as refunding the Series 2008 5337 bonds maturing June 1, 2019 through 2026 and the Series 2008A 5337 bonds maturing June 1, 2019 through 2023.

The Series 2017 bonds bear interest ranging from 2 percent to 5 percent. Interest is payable semiannually on June 1 and December 1, and the bonds mature serially from June 1, 2018 to June 1, 2026.

[Picture: Stacked Bar Graph: Capital Grant Receipts Revenue Bonds Section 5307 Debt Service. In $]

	Total Principal	Total Interest
2018	27,000,000	16,206,650
2019	31,275,000	15,799,775
2020	31,585,000	14,236,025
2021	41,410,000	12,656,775
2022	22,980,000	10,586,275
2023	24,125,000	9,437,275
2024	25,350,000	8,213,725
2025	26,635,000	6,928,013
2026	27,975,000	5,588,650
2027	31,170,000	4,169,750
2028	32,725,000	2,611,250
2029	20,000,000	975,000
Total	342,230,000	107,409,163

[Picture: Stacked Bar Graph: Capital Grants Receipts Revenue Bonds Section 5309 and 5337. In $]

	Total Principal	Total Interest
2018	19,690,000	9,777,308
2019	18,975,000	10,136,300
2020	19,735,000	9,374,250
2021	20,720,000	8,387,500
2022	21,755,000	7,351,500
2023	22,845,000	6,263,750
2024	23,985,000	5,121,500
2025	25,185,000	3,922,250
2026	26,440,000	2,663,000
2027	13,085,000	1,341,000
2028	13,735,000	686,750
Total	226,150,000	65,025,108

[Table: Schedule VI: Capital Grant Receipts Revenue Bonds (Federal Transit Administration Section 5307 & 5309 Formula Funds) Series 2008 Total Debt Service 2018]

SCHEDULE VI: $250,000,000 Capital Grant Receipts Revenue Bonds (Federal Transit Administration Section 5307 & 5309 Formula Funds) Series 2008 Total Debt Service 2018				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$8,490,000
2018	$8,490,000	$424,500	$8,914,500	-
Total:	**$8,490,000**	**$424,500**	**$8,914,500**	

[Table: Schedule VII: Capital grant Receipts Revenue Bonds (Federal Transit Administration Section 5309 Formula Funds) Series 2008A Total Debt Service 2018]

SCHEDULE VII: $175,000,000 Capital Grant Receipts Revenue Bonds (Federal Transit Administration Section 5309 Formula Funds) Series 2008A Debt Service 2018				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$9,935,000
2018	$9,935,000	$546,425	$10,481,425	-
Total:	**$9,935,000**	**$546,425**	**$10,481,425**	

[Table: Schedule VIII: Capital Grant Receipts Revenue Bonds (Federal Transit Administration Section 5307 & 5309 Formula Funds) Refunding Series 2010 Total Debt Service 2018-2028]

SCHEDULE VIII: $90,715,000 Capital Grant Receipts Revenue Bonds (Federal Transit Administration Section 5307 & 5309 Formula Funds) Refunding Series 2010 Total Debt Service 2018-2028				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$90,715,000
2018	$-	$4,535,750	$4,535,750	90,715,000
2019	-	4,535,750	4,535,750	90,715,000
2020	-	4,535,750	4,535,750	90,715,000
2021	-	4,535,750	4,535,750	90,715,000
2022	-	4,535,750	4,535,750	90,715,000
2023	-	4,535,750	4,535,750	90,715,000
2024	-	4,535,750	4,535,750	90,715,000
2025	-	4,535,750	4,535,750	90,715,000
2026	-	4,535,750	4,535,750	90,715,000
2027	44,255,000	4,535,750	48,790,750	46,460,000
2028	46,460,000	2,323,000	48,783,000	-
Total:	**$90,715,000**	**$47,680,500**	**$138,395,500**	

[Table: Schedule IX: Capital Grant Receipts Revenue Bonds Refunding Series 2011 Debt Service 2018-2029 Federal Transit Administration Section 5307 Urbanized Area Formula Funds]

SCHEDULE IX: $56,525,000 Capital Grant Receipts Revenue Bonds Refunding Series 2011 Debt Service 2018-2029 (Federal Transit Administration Section 5307 Urbanized Area Formula Funds)				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$56,525,000
2018	$-	$2,864,525	$2,864,525	56,525,000
2019	-	2,864,525	2,864,525	56,525,000
2020	-	2,864,525	2,864,525	56,525,000
2021	-	2,864,525	2,864,525	56,525,000
2022	6,595,000	2,864,525	9,459,525	49,930,000
2023	6,920,000	2,534,775	9,454,775	43,010,000
2024	7,285,000	2,171,475	9,456,475	35,725,000
2025	7,665,000	1,789,013	9,454,013	28,060,000
2026	8,060,000	1,398,150	9,458,150	20,000,000
2027	-	975,000	975,000	20,000,000
2028	-	975,000	975,000	20,000,000
2029	20,000,000	975,000	20,975,000	-
Total:	**$56,525,000**	**$25,141,038**	**$81,666,038**	

[Table: Schedule X: Capital Grant Receipts Revenue Bonds Refunding Series 2015 Debt Service 2018-2026 (Federal Transit Administration Section 5307 Urbanized Area Formula Funds)
(Federal Transit Administration Section 5337 State of Good Repair Formula Funds]

SCHEDULE X: $176,920,000 Capital Grant Receipts Revenue Bonds Refunding Series 2015 Debt Service 2018-2026 (Federal Transit Administration Section 5307 Urbanized Area Formula Funds) (Federal Transit Administration Section 5337 State of Good Repair Formula Funds)				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$176,920,000
2018	$27,290,000	$8,846,000	$36,136,000	149,630,000
2019	31,580,000	7,481,500	39,061,500	118,050,000
2020	31,905,000	5,902,500	37,807,500	86,145,000
2021	41,745,000	4,307,250	46,052,250	44,400,000
2022	350,000	2,220,000	2,570,000	44,050,000
2023	370,000	2,202,500	2,572,500	43,680,000
2024	13,855,000	2,184,000	16,039,000	29,825,000
2025	14,550,000	1,491,250	16,041,250	15,275,000
2026	15,275,000	763,750	16,038,750	-
Total:	**$176,920,000**	**$35,398,750**	**$212,318,750**	

[Table: Schedule XI: Capital Grant Receipts Revenue Bonds Refunding Series 2017 Debt Service 2018-2026 (Federal Transit Administration Section 5307 Urbanized Area Formula Funds) (Federal Transit Administration Section 5337 State of Good Repair Formula Funds]

SCHEDULE XI: $225,795,000 Capital Grant Receipts Revenue Bonds Refunding Series 2017 Debt Service 2018-2026 (Federal Transit Administration Section 5307 Urbanized Area Formula Funds) (Federal Transit Administration Section 5337 State of Good Repair Formula Funds)				
PAYMENT YEAR	**PRINCIPAL PAYMENT**	**INTEREST PAYMENT**	**TOTAL DEBT SERVICE**	**DEBT OUTSTANDING (as of 12/31)**
				$225,795,000
2018	$975,000	$8,766,758	$9,741,758	224,820,000
2019	18,670,000	11,054,300	29,724,300	206,150,000
2020	19,415,000	10,307,500	29,722,500	186,735,000
2021	20,385,000	9,336,750	29,721,750	166,350,000
2022	37,790,000	8,317,500	46,107,500	128,560,000
2023	39,680,000	6,428,000	46,108,000	88,880,000
2024	28,195,000	4,444,000	32,639,000	60,685,000
2025	29,605,000	3,034,250	32,639,250	31,080,000
2026	31,080,000	1,554,000	32,634,000	-
Total:	**$225,795,000**	**$63,243,058**	**$289,038,058**	

TIFIA Loans

The Federal government passed the Transportation Infrastructure Finance and Innovation Act (TIFIA) in 1998 to provide federal credit assistance to surface transportation public entities wishing to advance qualified, large-scale surface transportation projects that might otherwise be delayed because of size, complexity, or uncertainty over the timing of revenues.

TIFIA financing is a highly recommended form of government borrowing because it improves the affordability of the debt and maximizes borrowing capacity. TIFIA loans are provided through the United States Department of Transportation (U.S. DOT) and allow municipalities to secure a loan at interest rates equal to the federal government's rate, which has been 1.0-1.5 percent lower than traditional financing, and saves additional interest costs. Municipalities are also able to draw TIFIA funds on an "as needed" basis during a project, similar to a line of credit, and do not have to pay interest on funds that are issued all at once, further saving interest costs.

A TIFIA loan must not exceed one-third of the reasonably anticipated Eligible Project Total Costs, and the total federal funding for the project, inclusive of the TIFIA Loan and all federal direct or indirect grants, shall not exceed eighty percent (80 percent) of reasonably anticipated Eligible Project Costs. TIFIA loans can be secured by a variety of sources, depending on the transportation system. CTA currently has three TIFIA loans and is applying for a fourth. All CTA TIFIA loans are secured by CTA Farebox Receipts and debt service obligations are paid by operating funds.

TIFIA Loan 1-2014 95th Street Terminal Improvement Project

On April 24, 2014, CTA entered into a definitive loan agreement with U.S. DOT acting by and through the Federal Highway Administration under the TIFIA loan program. The principal amount of the TIFIA Loan shall not exceed $79,200,000, or thirty-three percent (33 percent) of reasonably anticipated Eligible Project Costs for the 95th Street Terminal Improvement Project. As evidence of CTA's obligation to repay

the TIFIA Loan, CTA has issued to the lender a registered farebox receipts revenue bond in the amount of $79.2 million dated April 24, 2014 with a maturity date of December 1, 2050 bearing an interest rate of 3.5 percent. A loan amortization with a debt service schedule will be provided once the funds are drawn down to fund the redevelopment project. The TIFIA loan is estimated to save the CTA approximately $20 million.

TIFIA Loan 2-2015 Your New Blue Improvement Project

On February 3, 2015, CTA entered into a definitive loan agreement with the U.S. DOT acting by and through the Federal Highway Administration under the TIFIA loan program. The principal amount of the Your New Blue TIFIA Loan is an aggregate total not to exceed $120,000,000; in two tranches (Series 2015A-1 for $42,631,692 and Series 2015A-2 for $77,368,308) or thirty-three percent (33 percent) of reasonably anticipated Eligible Project Costs for the Your New Blue Improvement Project. As evidence of CTA's obligation to repay the TIFIA Loan, CTA issued to the lender two registered farebox receipts revenue bonds in the following amounts (Series 2015A-1 Bond for $42,631,692 with a final maturity date of December 1, 2029 bearing an interest rate of 2.02 percent and Series 2015A-2 Bond for $77,368,308 with a final maturity date of December 1, 2052 bearing an interest rate of 2.31 percent). A loan amortization with a debt service schedule will be provided once the funds are drawn down for the redevelopment project. For this project, TIFIA financing is estimated to save the CTA approximately $50 million.

TIFIA Loan 3-2016 Railcars

On March 30, 2016, CTA entered into a third definitive loan agreement with the U.S. DOT, and through the Federal Highway Administration under the TIFIA loan program to finance certain projects that are part of CTA's Rail Car Purchase Program. The principal amount of the Railcars TIFIA Loan is an aggregate total not to exceed $254,930,402; in two tranches (Series 2016A-1 for $147,018,363 and Series 2016A-2 for $107,912,039) or thirty-three percent (33 percent) of reasonably anticipated Eligible Project Costs for the new railcars.

As evidence of CTA's obligation to repay the TIFIA Loan, CTA issued to the lender two registered farebox receipts revenue bonds in the following amounts (Series 2016A-1 Bond for $147,018,363 with a final maturity date of December 1, 2049 bearing an interest rate of 2.64 percent and Series 2016A-2 Bond for $107,912,039 with a final maturity date of December 1, 2056 bearing an interest rate of 2.64 percent). A loan amortization with a debt service schedule will be provided once the funds are drawn down for the redevelopment project. For this project, TIFIA financing is estimated to save the CTA approximately $100 million.

Lease/Leaseback Agreements

The CTA entered into several economically defeased lease and leaseback agreements in fiscal years 1995 through 2013. These agreements were entered into with various third parties and pertain to certain assets of the CTA, including rail lines and equipment, rail cars, facilities, buses and qualified technology equipment. Under the lease/leaseback financings, the CTA entered into a long-term lease for applicable assets with trusts established by equity investors; trusts which concurrently leased the respective assets back to CTA under sublease agreements. Each sublease contains a fixed date and a fixed price purchase option that allows the CTA, at its option, to purchase the assets back from the lessor. The debt service obligations are all paid by capital funds.

Public Building Commission Lease (2003/2006)

On October 26, 2006, the Public Building Commission of Chicago (PBC) issued $91.3 million of Building Revenue Refunding Bonds for the benefit of the CTA to refund the amount outstanding originally issued in 2003. The proceeds of the bonds were used to advance refund to the PBC, Series 2003 bonds. The original, executed lease in connection with the Series 2003 bonds was amended accordingly.

The PBC used the proceeds of the 2003 bonds, among other things, to acquire the site for and construct a 12-story office building. The PBC leased the building to the CTA for a 20-year term to be used as CTA headquarters. Rent payments due to the PBC from the CTA under the lease are general obligations of the CTA payable from any lawfully-available funds. Upon satisfaction of all of the obligations of the CTA under the lease and payment, or provision for payment, of the PBC Bonds in full, the PBC will transfer title of the leased premises to the CTA.

The CTA is obligated to pay to the Trustee on behalf of the PBC on or before February 15 of each year in which the headquarters lease is in effect, rent which equals the debt service on the PBC bonds due through and including September 1 of that calendar year. The source of funds for the PBC lease payments is primarily FTA grant funds.

Artics Hybrid Bus Lease (2008/2013)

During 2008, the CTA entered into a lease-purchase agreement to finance the purchase of 150 sixty-foot New Flyer articulated hybrid buses and certain related parts and equipment with a book value of $42.13 million at December 31, 2016. The terms of the agreement allow the CTA to lease the buses for 12 years and retain ownership at the conclusion of the lease. Lease payments are due every June 1 and December 1 of each year, beginning on December 1, 2008. During 2013, CTA terminated the 2008 agreement and entered into a 2013 lease-purchase agreement with the same term and reduced rental payments. The present value of the future payments to be made by the CTA under the lease was approximately $43.9 million as of December 31, 2016. Annual principal and interest debt service payments of $13,085,425 are payable from 2017 to 2019, with the final debt service payment of $6,542,712.64 due in 2020. A full debt service schedule has not been included as the *Artics Hybrid Bus Lease* is a private placement.

New Flyer Low Floor Bus Lease (2008 COPs)

In August 2008, the Bank of New York Mellon issued Certificates of Participation (COPs) totaling $78.4 million on behalf of the CTA with an interest rate of 4.725 percent. The COPs were used to finance the purchase of 200 (40 ft.) New Flyer low floor buses and certain related parts and equipment. On August 1, 2008, the CTA entered into an installment purchase agreement with the Bank of New York Mellon. The obligation of the CTA to make installment payments is an unconditional obligation and is payable from legally available funds. The installment agreement requires the CTA to make annual COP payments to the Bank of New York Mellon which are remitted to the COP holders. Scheduled maturity dates occur at various times through December 1, 2020. During 2013, CTA amended the original 2008 agreement that amended terms and reduced interest rates. The total principal remaining to be paid on the COPs as of December 31, 2016, was $29.8 million. Annual principal and interest debt service payments of $7,911,700.48 are required to be made from 2017 to 2020. A full debt service schedule has not been included as the *New Flyer Low Floor Bus Lease* is a private placement.

[Picture: Stacked Bar Graph: Public Building Commission Lease on Behalf of CTA Debt Service. In $]

	Total Principal	Total Interest
2018	2,785,000	3,403,969
2019	2,915,000	3,271,913
2020	3,065,000	3,122,413
2021	3,225,000	2,965,163
2022	3,390,000	2,799,788
2023	3,565,000	2,621,456
2024	3,760,000	2,429,175
2025	3,960,000	2,226,525
2026	4,175,000	2,012,981
2027	4,400,000	1,787,888
2028	4,635,000	1,550,719
2029	4,890,000	1,300,688
2030	5,150,000	1,037,138
2031	5,430,000	759,413
2032	5,720,000	466,725
2033	6,030,000	158,288
Total	67,095,000	31,914,242

[Table: Schedule XII $91,340,000 Building Revenue Bonds (Public Building Commission on behalf of Chicago Transit Authority) Series 2006 Lease Payment Schedule 2018-2033]

SCHEDULE XII: $91,340,000 Building Revenue Bonds
(Public Building Commission on behalf of Chicago Transit Authority)
Series 2006 Lease Payment Schedule 2018-2033

PAYMENT YEAR	PRINCIPAL PAYMENT	INTEREST PAYMENT	TOTAL LEASE PAYMENT	DEBT OUTSTANDING (as of 12/31)
				$67,095,000
2018	$2,785,000	$3,403,969	$6,188,969	64,310,000
2019	2,915,000	3,271,913	6,186,913	61,395,000
2020	3,065,000	3,122,413	6,187,413	58,330,000
2021	3,225,000	2,965,163	6,190,163	55,105,000
2022	3,390,000	2,799,788	6,189,788	51,715,000
2023	3,565,000	2,621,456	6,186,456	48,150,000
2024	3,760,000	2,429,175	6,189,175	44,390,000
2025	3,960,000	2,226,525	6,186,525	40,430,000
2026	4,175,000	2,012,981	6,187,981	36,255,000
2027	4,400,000	1,787,888	6,187,888	31,855,000
2028	4,635,000	1,550,719	6,185,719	27,220,000
2029	4,890,000	1,300,688	6,190,688	22,330,000
2030	5,150,000	1,037,138	6,187,138	17,180,000
2031	5,430,000	759,413	6,189,413	11,750,000
2032	5,720,000	466,725	6,186,725	6,030,000
2033	6,030,000	158,288	6,188,288	-
Total:	**$67,095,000**	**$31,914,242**	**$99,009,242**	

Annual Budget Process

Budget Calendar

The RTA Act requires the RTA Board to adopt a consolidated annual operating and capital budget and associated two and five-year financial plans. The budgetary process contains three phases: budget development, budget adoption, and budget execution and administration.

Budget Development

The CTA annual budget development process serves as the foundation for its financial planning and control. The Chief Financial Officer and staff prepare and submit the budget to the Board of Directors for consideration and approval. The annual budget consists of both the operating and capital budgets. It is the responsibility of each department to adhere to approved spending levels and manage its operations efficiently and in alignment with CTA's goals and programs authorized by the Board.

The budget development process is a joint effort. Major phases include the following:

1) Development of key assumptions and drivers, based on CTA's strategic initiatives, including feedback from the riding public and taxpayers. Initiatives vetted with the CTA's riders, communities, and tax payers may become part of the Plan.
2) Budget formulation includes department submissions and reviews and justification;
3) Presentation of the proposed operating and capital budgets to the President and Chief Operating Officer;
4) Board discussions, public hearings;
5) Budget adoption by the Board; and
6) Budget implementation, managing, and monitoring.

[Picture: Budget Process is six step process with Budget Office facilitating the process]

1. Develop Strategy, Initiatives,Goals and Objectives; Outreach
2. Department Submittals; Budget Review Sessions
3. President/ Chief Operating Officer Budget Presentation
4. Board Discussios, Public Hearing (s)
5. Baord Adoption of Budget
6. Budget Implementation; Manage and Monitor

Budget Adoption [table of dates and steps needed for budget adoption]

July 15	**RTA Budget Call –** RTA releases the requirements that the Service Boards must follow for the development of their 2018 budget, two-year financial plan, and five-year capital program.
September 15	**RTA Releases and Announces Marks**. The RTA Board is required by the RTA Act to set operating and capital funding marks for the three Service Boards by September 15. The operating marks include estimates of available public funding for the budget and financial plan and a required recovery ratio (the ratio or percentage of operating expenses that must be recovered from system-generated revenues) for the budget. Upon issuance of the budget marks, the CTA revises

its expenses and revenues to conform to the marks.

The capital marks provide estimates of available grant receipts from federal, state, and local sources for the proposed fiscal year and the remaining years of the five year capital plan.

CTA develops a 5-year capital improvement program that identifies the capital projects programmed for funding along with the source of funds to implement the capital projects.

November 22 **CTA Budget released to the public.** The statute requires that documents be available for public inspection 3 weeks prior to the public hearing.

December 12 **Public Hearing** to be scheduled to receive comments from the public.

December 13 **Budget submission to the RTA**. The RTA Act requires that the CTA, by November 15, submit its detailed budget, financial plan and capital improvement plan to the RTA. The budget must conform to the marks set by the RTA by the statutory deadline of September 15. *The CTA and RTA agreed upon the revised schedule.*

December 13 Budget presentation to **Cook County Board**. The CTA presents the budget to the Cook County Board after the Public Hearing but prior to the CTA adoption of the budget, as required by the RTA Act.

December 13 **Chicago Transit Board vote**. The Chicago Transit Board incorporates any changes and adopts the operating and capital fiscal year budget and financial plans.

December 14 **RTA Board** vote on consolidated regional budget. The RTA Board adopts the proposed fiscal year operating and capital budget and the two year and five year financial plan upon the approval of 12 of the RTA's 16 directors.

January 4, 2018 **RTA and CTA submit the capital improvement program** to the Chicago Metropolitan Agency for Planning (CMAP). CMAP adopts and incorporates CTA's capital projects in the Regional Transportation Improvement Program, allowing CTA to apply for Federal funding for these projects.

RTA Statutory Requirements for Budget Approval

The RTA Board adopts the proposed budget and plan upon the approval of 12 of the RTA's 16 directors. If the budget meets the RTA's criteria, which are identified in the RTA Act and outlined below, then the RTA is required to adopt the budget. If the RTA Board does not approve the budget, the RTA Board cannot release any funds for the periods covered by the budget and two-year financial plan, except the proceeds of sales taxes due by the statutory formula to the CTA, until the budget conforms to the criteria specified in

the Act.

The criteria for budget and plan approval per RTA Act are:

1. **Balanced Budget**: The budget and plan show a balance between (A) anticipated revenues from all sources including operating subsidies and (B) the costs of providing the services specified and of funding any operating deficits or encumbrances incurred in prior periods, including provision for payment when due of principal and interest of outstanding indebtedness.
2. **Capital Budget**: The capital improvement plan lists projects with funding sources. All of the capital projects are eligible for Federal and RTA funding and meet all requirements. Project budgets and schedules are also provided to RTA for each project.
3. **Cash Flow:** The budget and plan show cash balances, including the proceeds of any anticipated cash flow borrowing sufficient to pay with reasonable promptness all costs and expenses incurred.
4. **Recovery Ratio**: The budget and plan provide for a level of fares or charges and operating or administrative costs for the public transportation provided by or subject to the system-generated revenue recovery ratio.
5. **Assumptions**: The budget and plan are based upon and employ assumptions and projections, which are reasonable and prudent.
6. **Financial Practices**: The budget and plan have been prepared in accordance with sound financial practices as determined by the RTA Board.
7. **Other Requirements**: The budget and plan meet such other financial, budgetary, or fiscal requirements that the RTA Board may by rule or regulation establish.
8. **Strategic Plan**: The budget and plan are consistent with the goals and objectives adopted by the RTA Board in the Strategic Plan.

Budget Execution & Administration

After the proposed budget and financial plan are adopted, the budget execution and administration phase begins. Detailed budgets of operating revenues and expenses calendarized for the 12 months of the budget year are forwarded to the RTA. The CTA's actual monthly financial performance is measured against the monthly budget and reported to the RTA Board. Detailed capital grant applications are prepared and submitted to funding agencies. Quarterly capital program progress reports, along with milestones, are provided to the RTA Board to monitor expenditures and obligations for capital program items. RTA meets with CTA quarterly to review the status of capital projects.

Amendment Process

As the CTA monitors actual performance, changes may be required to the budget. The RTA might revise its sales tax forecast, which could result in less public funding for the CTA. This in turn would require reduced spending to meet the revised funding mark and recovery ratio.

When the RTA amends a revenue estimate because of changes in economic conditions, governmental funding, a new program, or other reasons, the CTA has 30 days to revise its budget to reflect these changes. The RTA's Finance Committee must approve all amendments before they are recommended to the RTA Board for approval. The budget

may also be amended based upon financial condition and results of operations if the CTA is significantly out of compliance with its budget for a particular quarter. The RTA Board, by a vote of 12 members, may require the CTA to submit a revised financial plan and budget, which show that the marks will be met in a time period of less than four quarters. If the RTA Board determines that the revised budget is not in compliance with the marks, the RTA will not release discretionary funds. RTA discretionary funds include monies from the Public Transportation Fund (PTF), discretionary sales tax, and other state funding. If the Authority submits a revised financial plan and budget which show the marks will be met within a four-quarter period, then the RTA Board shall continue to release funds.

As capital projects proceed, changes may be required to project budgets. Capital funding marks may be revised based on actual federal or state appropriations actions. When revisions are necessary, the CTA will amend its five-year capital program and submit the changes to the RTA for RTA Board action.

Accounting System and Financial Controls

Organization Overview

The CTA was formed in 1945 pursuant to the Metropolitan Transportation Authority Act passed by the Illinois Legislature. The CTA was established as an independent governmental agency (an Illinois municipal corporation) "separate and apart from all other government agencies" to consolidate Chicago's public and private mass transit carriers. The City Council of the City of Chicago granted the CTA the exclusive right to own and operate a unified, local transportation system.

The Regional Transportation Authority Act provides for the funding of public transportation in the six-county region of Northeastern Illinois. The Act established a regional oversight board, the Regional Transportation Authority (RTA), and designated three Service Boards: the CTA, the Commuter Rail Board, and the Suburban Bus Board. The Act requires, among other things, that the RTA approve the annual budget of the CTA; that the CTA obtain agreement from local governmental units to provide an annual monetary contribution of at least $5 million for public transportation; and that the CTA, collectively with the other Service Boards, finance at least 50 percent of operating costs, excluding depreciation and certain other items, from system-generated sources on a budgetary basis.

Financial Reporting Entity

As defined by U.S. generally accepted accounting principles (GAAP), the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable.

Financial accountability is defined as:

1) Appointment of a voting majority of the component unit's board and either (a) the ability to impose will by the primary government or (b) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the primary government.
2) Fiscal dependency on the primary government.

In conformance with Governmental Accounting Standards Board (GASB) standards, the CTA includes in its financial statements all funds over which the Chicago Transit Board exercises oversight responsibility. Oversight responsibility is defined to include the following considerations: selection of governing authority, designation of management, ability to significantly influence operations, accountability for fiscal matters, and scope of an organization's public service and/or special financing relationships.

The CTA participates in the Employees' Retirement Plan, which is a single-employer, defined benefit plan covering substantially all full-time permanent union and nonunion employees. The Employees' Plan is governed by state statute (40 ILCS 5/22-101). The fund, established to administer the Employees' Retirement Plan, is not a fiduciary fund or component unit of the CTA. This fund is a legal entity separate and distinct from the CTA. This plan is administered by its own board of trustees comprised of five union representatives, five representatives appointed by the CTA, and a professional fiduciary appointed by the RTA. The CTA has no direct authority and assumes no fiduciary responsibility with regards to the Employees' Retirement Plan. Accordingly, the accounts of this fund are not included in the CTA's financial statements.

The Retiree Health Care Trust (RHCT) provides and administers health care benefits for CTA retirees and their dependents and survivors. The RHCT is not a fiduciary fund or a component unit of the CTA. This trust is a legal entity separate and distinct from the CTA. This trust is administered by its own board of

trustees comprised of three union representatives, three representatives appointed by the CTA, and a professional fiduciary appointed by the RTA. The CTA has no direct authority and assumes no fiduciary responsibility with regards to the RHCT. Accordingly, the accounts of this fund are not included in the CTA's financial statements.

Based upon the criteria set forth by the GASB, the CTA is not considered a component unit of the RTA because the CTA maintains separate management, exercises control over all operations, and is fiscally independent from the RTA. Because governing authority of the CTA is entrusted to the Chicago Transit Board, comprised of four members appointed by the Mayor of the City of Chicago and three members appointed by the Governor of the State of Illinois, the CTA is not financially accountable to the RTA and is not included as a component unit in the RTA's financial statements. As statutorily required, the CTA is combined in pro forma statements with the RTA.

Budget and Budgetary Basis of Accounting

The CTA is required under Section 4.01 of the RTA Act to submit for approval an annual budget to the RTA by November 15th of each year. The budget is prepared on a basis consistent with generally accepted accounting principles (GAAP), except for the exclusion of certain income and expenses, and consistent with the basis of accounting and required recovery ratio. The excluded income and expense amounts include the following:

- Provision for injuries and damage in excess of (or under) budget,
- Depreciation expense,
- Pension expense in excess of pension contributions,
- Actuarial adjustments,
- Revenue and expense from bond transactions,
- Revenue and expense from sale/leaseback transactions, and
- Capital contributions.

The Act requires that expenditures for operations and maintenance in excess of budget cannot be made without the approval of the Chicago Transit Board. All annual appropriations lapse at fiscal year-end.

Public funding assistance, administered through the RTA, provides the public funding revenue for the budgets of the Service Boards. Favorable variances from budget remain as operating assistance to the CTA.

The RTA approves the proposed budget based on four criteria:

- That the budget is in balance with regard to anticipated revenues from all sources, including operating subsidies, costs of providing services, and funding operating deficits;
- That the budget provides for sufficient cash balances to pay, with reasonable promptness, costs and expenses when due;
- That the budget provides for the CTA to meet its required system-generated revenue recovery ratio;
- That the budget is reasonable and prepared in accordance with sound financial practices, and complies with such other RTA requirements as the RTA Board of Directors may establish.

The RTA monitors the CTA's performance against the budget on a quarterly basis. If, in the judgment of the RTA, this performance is not substantially in accordance with the CTA's budget for such period, the RTA shall so advise the CTA and the CTA must, within the period specified by the RTA, submit a revised budget to bring the CTA into compliance with the budgetary requirements listed above.

Financial Reporting

Overview

The CTA's financial statements are prepared in conformity with GAAP. GASB is the accepted standard-setting body for establishing governmental accounting and reporting principles. The CTA applies Financial Accounting Standards Board (FASB) pronouncements and Accounting Principles Board (APB) opinions issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements, in which case the GASB prevails.

Basis of Presentation

The financial statements provide information about the CTA's business-type and fiduciary (Qualified Supplemental Retirement Plan) activities. Separate financial statements are presented for each category. The financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows.

The financial statements for CTA's business-type activities are used to account for the operations of the CTA and are accounted for on a proprietary (enterprise) fund basis. This basis is used when operations are financed and operated in a manner similar to a private business enterprise, where the intent of the governing body is that the costs of providing services to the general public be financed or recovered primarily through user charges such as fares.

Accordingly, the CTA maintains its records on the accrual basis of accounting. Under this basis, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, depreciation of assets is recognized, and all assets and liabilities associated with the operation of the CTA are included in the balance sheet.

The financial statements for the fiduciary activities are used to account for the assets held by the CTA in trust for the payment of future retirement benefits under the Qualified Supplemental Retirement Plan. The assets of the Qualified Supplemental Retirement Plan cannot be used to support CTA operations.

Fiscal year

The operating cycle of the CTA is based on the calendar year. Prior to 1995, the CTA operated on a 52-week fiscal year composed of four quarters of "four week, four week, and five week" periods. Periodically, a 53-week fiscal year was required to keep the fiscal year aligned with the calendar.

Internal Controls

Overview

CTA management is responsible for establishing and maintaining an internal control system designed to ensure that the assets of the CTA are protected from loss, theft, or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with GAAP. The internal control system is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that the cost of internal control should not exceed the benefits likely to be derived, and that the evaluation of costs and benefits requires estimates and judgments by management.

All internal control evaluations occur within the above framework. The CTA's internal accounting controls are reasonable under the existing budgetary constraints and adequately safeguard assets as well as provide reasonable assurance of proper recording of all financial transactions.
Each year, the CTA conducts internal and external audits to test the adequacy of its internal control system. Where weaknesses are identified, the CTA takes immediate action to correct such weaknesses to ensure a sound internal control system.

Single Audit

As a recipient of federal, state, and RTA financial assistance, the CTA is responsible for ensuring that an adequate internal control system is in place to ensure compliance with applicable laws and regulations related to those programs. This internal control system is subject to periodic evaluation by management and the internal audit staff of the CTA, as well as external auditors.

As part of the CTA's single audit, tests are performed to determine the adequacy of the internal control system, including the portion related to federal financial assistance programs, as well as to determine that the CTA has complied with applicable laws and regulations.

Budgeting Controls

In addition, the CTA maintains budgetary controls to ensure compliance with legal provisions embodied in the annual budget appropriated by the Chicago Transit Board and approved by the RTA. The level of budgetary control (that is, the level at which expenditures cannot legally exceed the appropriated amount) is established for total operating expenses. The CTA also maintains a position control system, which requires that every job that is not part of scheduled transit operations be budgeted on an annual basis.

Financial Policy

Financial Planning Policies

Financial planning policies incorporate both short- and long-term strategies focused on the principles of a balanced budget. These policies ensure proper resource allocation and the continued financial viability of the organization. The CTA reviews the policies on an annual basis as part of the budget process to ensure continued relevance to the organization's goals and objectives.

A Balanced Budget

The budget reflects the short-term goals of the agency. Following development, adoption, and implementation of the annual budget, the CTA continually monitors actual monthly financial performance against the budget. Each month, the CTA performs a detailed line-by-line analysis of revenues and expenses to determine operating variances. This includes reviewing position headcount, analyzing material and other expenses, examining revenue scenarios for potential shortfalls, applying seasonality spread in relation to business activities, and conducting continuous audits to ensure a balanced budget. Where potential year-end variances to budget are projected, the CTA uses various strategies to manage them. A monthly financial performance report is produced and submitted to the CTA and RTA boards for their review.

The RTA Act requires the CTA to have a balanced budget each year. As such, the CTA takes care in the development of its budget to ensure that assumptions and estimates used to develop the budget are reasonable. The CTA analyzes data from recent years and develops forecasts that are built on actual expense trends. The CTA also researches market trends and consultants' studies that could impact fuel and healthcare expenses. All expenses match available revenues at the time of the budget, including system-generated and other revenues, as well as public funding.

Long-Range Planning

The CTA also develops a longer-range plan for the period beyond the current budget and two-year financial plan. This ten-year plan assesses the implications of current and proposed budgets, policy priorities, and financial assumptions. Additionally, external economic studies, demographics, and traffic patterns are used to estimate the future transit needs of the Chicago metropolitan area, and to establish the future system requirements of the CTA. Current infrastructure needs, as well as system growth needs, are developed, prioritized, and incorporated into the long-term plan.

Capital Investment Planning

The CTA continuously maintains an inventory and assessment of the condition of all major capital assets. A detailed five-year capital program prioritizes the short-term capital needs that are necessary to bring the system to a state of good repair, as well as to maximize customer benefits in the regional transit system. CTA is also developing a Transit Asset Management system to assist in prioritizing future capital projects. A 20-year capital program condition and assessment report provides a broader list of the CTA's capital investment needs.

Revenue Policies

The principal operating revenues of the CTA are bus and rail passenger fares, which are established by the CTA's Board. The CTA also recognizes as revenue the rental fees received from concessionaires, the fees collected from advertisements on CTA property, and other miscellaneous operating revenues. A clear

understanding of CTA revenue sources is essential to maintaining a balanced budget and for providing quality service to customers.

Revenue Diversification

Organizational units are encouraged to submit revenue ideas for consideration. The CTA has embarked upon numerous alternative revenue enhancements, such as vending machines and ATMs on the system, wireless communications in the subway tunnels, digital communications, and parking under the elevated rights-of-way. The CTA continues to find ways to enhance system advertising, charters, and concession revenues, as well as revenue from investments.

Use of One-Time Revenues

Extraordinary revenues from the sale of surplus assets provide one-time benefits to the CTA. These additional revenues are used to fund non-recurring expense items.

Expenditure Policies

CTA expenditures include the costs of operating the mass transit system, administrative expenses, and depreciation on capital assets. Prudent expenditure planning, monitoring, and accountability are key elements of fiscal stability.

Debt Capacity, Issuance and Management

These policies serve as a management tool to ensure that the CTA:

- may utilize leverage as part of its overall funding strategy to speed up investment in the system;
- utilizes debt in the most efficient and effective manner to fund operating and capital improvement programs; and
- makes full and timely repayment of all borrowings.

Moreover, the policy provides broad guidelines to ensure that the agency achieves the lowest possible cost of capital within prudent risk parameters, secures ongoing access to the capital markets, and authorizes the appropriate amount, type, and structure of debt for various financing situations.

Expenditure Accountability

Each month, the CTA compares its operating and capital performance to budget. Any deviations from budget are reviewed and corrective measures are implemented by the appropriate organizational units. Each unit is responsible for maintaining budget compliance. Actual capital expenditures are also reviewed monthly and adjustments to capital projects spending are made accordingly.

Economic Indicators

Overview

CTA ridership and revenue are influenced by overall employment levels and relative transportation costs. The local labor market and commuting costs are, in turn, influenced by national economic conditions. Long-term ridership and public funding trends can also provide context for national economic conditions.

Locally and nationally, the employment situation has improved since the recession. The total number of people employed is higher, and the unemployment rate is lower than a few years ago. Chicago-area employment levels have now matched their pre-recession levels.

Growing employment levels combined with high downtown parking costs increase the relative value of public transportation. Decreasing gas prices, however, increase car use, lowering ridership and slowing down buses due to increased street congestion. More alternatives such as bike share and ride-hailing have also impacted CTA ridership in 2017.

In addition, the number of visitors to Chicago has increased in the past few years, with a record 54.1 million visitors to the city in 2016, an increase of 2.9 percent over 2015. Additional visitors have a positive impact on ridership and can be seen particularly at the airport stations and during the summer months.

Employment

The seasonally-adjusted non-farm employment in the Chicago metropolitan area recovered to a monthly average of 4,679,000 through September 2017 since reaching a low point of 4,226,000 in January 2010.

The 0.6 percent increase in payroll in the Chicago area from 2016 to 2017 year-to-date is outpaced by the national 1.3 percent increase during the same time period. However we have seen an increase of 10.3 percent in employment since the low point in 2010.

[Table: Non-Farm Employment 2007-2017]

Total Non-Farm Employment 2007-2017 (in thousands)											
(2017 is year-to-date monthly average, seasonally adjusted)											
Source: Bureau of Labor Statistics											
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
National	137,997	137,240	131,300	130,353	131,941	134,171	136,379	138,937	141,813	144,306	146,178
% Change	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.3%
Chicago Area	4,554	4,525	4,288	4,243	4,302	4,373	4,441	4,506	4,593	4,653	4,679
% Change	0.8%	-0.6%	-5.2%	-1.1%	1.4%	1.6%	1.6%	1.5%	1.9%	1.3%	0.6%

Unemployment Rate

The Chicago metropolitan area seasonally-adjusted unemployment rate averaged 4.7 percent through September 2017. This compares to a 4.4 percent national average - the lowest rate since the year 2000. The Chicago area unemployment rate decreased by 1.3 percentage points compared to 2015, and 1.2 percentage points compared to 2016.

[Graph: Unemployment rates comparison 2007-2017 Chicago vs National]

	Chicago Area	National
2003	7.0%	6.0%
2004	6.5%	5.5%
2005	6.0%	5.1%
2006	4.6%	4.6%
2007	5.0%	4.6%
2008	6.2%	5.8%
2009	10.2%	9.3%
2010	10.6%	9.6%
2011	10.1%	8.9%
2012	9.3%	8.1%
2013	9.3%	7.4%
2014	7.2%	6.2%
2015	6.0%	5.3%
2016	5.9%	4.9%
2017	4.7%	4.4%

Fuel Prices

Nationally, consumer gas prices dropped in 2015 and 2016. Through year-to-date 2017, prices have increased to levels comparable to 2015. Prices during this period have ranged from a low of $1.77 in February 2016 to a high of $2.83 in July 2015.

The average price for Unleaded Regular Gasoline in 2017 has increased 11.9 percent since the beginning of the year, with an average cost of $2.38 per gallon through September.

Diesel fuel prices showed a similar pattern, with the monthly average falling from $3.00 per gallon in January 2015 to $2.00 per gallon in February 2016,but rising again in 2017. Through September, the 2017 year-to-date average is $2.58 per gallon, with the price for September representing a 7.9 percent increase from the beginning of the year.

[Graphs No. 1: Unleaded Regular Gas Price Per Gallon 2006-2016]

Year	Average Price Per Gallon
2007	$ 2.88
2008	$ 3.81
2009	$ 2.46
2010	$ 2.99
2011	$ 3.85
2012	$ 3.97
2013	$ 3.92
2014	$ 3.83
2015	$ 2.71
2016	$ 2.31
2017	$ 2.58

[Graphs No.2: Diesel Price Per Gallon 2006-2016]

Year	Average Price Per Gallon
2007	$ 2.80
2008	$ 3.27
2009	$ 2.35
2010	$ 2.79
2011	$ 3.53
2012	$ 3.64
2013	$ 3.53
2014	$ 3.37
2015	$ 2.45
2016	$ 2.14
2017	$ 2.38

Consumer Price Index (CPI)

The CPI measures the average change over time in the prices paid by urban consumers for a fixed set of goods and services. An increase in the index, such as the one experienced from 2015 to date, means consumers have to pay more dollars to buy the same goods and services. Through September of 2017, the average CPI increased by 1.74 percent in the Chicago-area and by 1.80 percent nationally compared to 2016. Since 2015, the increase in the Chicago-area is 2.42 percent and nationally 2.75 percent.

[Graph: Consumer Price Index Change 2007-2017 National vs. Chicago]

Year	National	Chicago
2007	2.53%	3.29%
2008	3.73%	3.77%
2009	-0.47%	-1.20%
2010	1.42%	1.37%
2011	3.06%	2.73%
2012	1.95%	1.52%
2013	1.22%	1.14%
2014	1.45%	1.75%
2015	-0.12%	-0.30%
2016	0.93%	0.66%
2017	1.80%	1.74%

Producer Price Index (PPI)

The PPI measures average changes in prices received by domestic producers for their output. Three commodity categories are selected for trend illustration: industrial commodities less fuel, fuel, and iron and steel. Since 2016, the first category experienced a slight increase (2.67 percent), while fuel and iron and steel have increased substantially (11.0 and 13.3 percent, respectively). Since 2015, industrial commodities have increased 2.38 percent and iron and steel have increased 8.31 percent, while fuel has only increased by 0.93 percent.

[Graph: Producers Price Index Changes 2007-2017 for Industrial Commodities less Fuel, Fuel, Iron & Steel]

Year	Industrial Commodities less Fuel	Fuel	Iron & Steel
2007	2.9%	6.5%	7.8%
2008	6.0%	20.8%	22.5%
2009	-2.5%	-26.0%	-25.3%
2010	3.9%	17.1%	21.5%
2011	5.2%	16.2%	13.3%
2012	0.8%	-1.8%	-4.9%
2013	0.7%	-0.1%	-5.9%
2014	1.1%	-0.9%	2.5%
2015	-1.8%	-23.5%	-15.7%
2016	-0.4%	-9.1%	-4.4%
2017	2.7%	11.0%	13.3%

Gross Domestic Product (GDP)

GDP measures the value of goods and services produced in an area in a given year. National Real GDP has improved since 2010, with a growth rate of 2.8 percent in 2016 when compared to 2015. The Chicago Metropolitan Area has shown a similar trend over the last decade, with a 2.6 percent growth from 2015 to 2016.

[Graph: GDP Growth Rate Change 2007-2016 National vs. Chicago]

Year	National	Chicago
2007	4.49%	4.23%
2008	1.66%	-1.26%
2009	-2.04%	-2.14%
2010	3.78%	2.37%
2011	3.70%	3.52%
2012	4.11%	5.55%
2013	3.32%	1.37%
2014	4.41%	3.89%
2015	3.98%	4.33%
2016	2.78%	2.55%

Federal Funds Rate (FFR)

The FFR is the interest rate at which banks lend balances at the Federal Reserve to other depository institutions. The Federal Open Market Committee (FOMC) is tasked with setting a target for the FFR. So far, the FOMC has increased the Federal Funds Rate by 25 basis points to a target range of 1.00 percent to 1.25 percent at its June meeting. The Fed expects one more rate increase by the end of 2017.

[Graph: Federal Funds Rate 2007-2017]

Year	Average
2007	5.02%
2008	1.93%
2009	0.16%
2010	0.18%
2011	0.10%
2012	0.14%
2013	0.11%
2014	0.09%
2015	0.13%
2016	0.40%
2017	0.93%

Ten-Year U.S. Treasury Yield

The beginning of 2016 brought economic uncertainty which caused downward pressure on ten-year treasury yields. The rate declined to a low of 1.63 percent in the first quarter of 2016. The year ultimately saw an increase in yields, however, ending at 2.45 percent on December 30th. The markets have seen a steady decrease in ten-year treasury yields throughout 2017 so far, with rates in the second quarter averaging 2.26 percent. Rates are expected to reach 2.4 percent by the end of 2017 and lower slightly to 2.3 percent at the end of 2018. Lower long term rates provide incentives for both consumers and corporations to borrow more.

[Graph: Ten-Year US Treasury Notes Yield 2007-2017]

Year	Average
2007	4.63%
2008	3.67%
2009	3.26%
2010	3.21%
2011	2.79%
2012	1.80%
2013	2.35%
2014	2.54%
2015	2.14%
2016	1.84%
2017	2.32%

Historical Ridership

Over the last 20 years, ridership has been increasing nationally despite dips associated with recessions in the early 2000s and in 2009-2010. Since 2010, national ridership has increased 3.2 percent; however, ridership decreased in 2015 and again in 2016, with 2016 ridership decreasing 2.0 percent compared to 2015.

The Chicago Metropolitan Area's ridership has generally trended upward since the early 2000s. However, after a peak in the number of riders in 2012, ridership has declined returning to pre-recession numbers. As with the nation, 2016's ridership decreased 3.2 percent compared to 2015.

[Graph: National Historical Ridership 1996 to 2016 – In millions]
[Graph: Chicago Area Historical Ridership 1996 to 2016 – In millions]

	National	Chicago Area
1996	7,310	551
1997	7,709	549
1998	7,782	560
1999	8,161	583
2000	8,381	596
2001	8,692	599
2002	8,748	595
2003	8,615	581
2004	8,692	582
2005	8,996	603
2006	9,260	610
2007	9,886	619
2008	10,208	649
2009	10,089	633
2010	9,915	628
2011	10,049	646
2012	10,352	664
2013	10,409	645
2014	10,505	630
2015	10,439	630
2016	10,234	610

Operating Statistics

[Table: System Operating Statistics; Ridership, Expense, Revenue 2014-2016 Actuals, 2017 Forecast, 2018 Budget]

Characteristics	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Budget
Ridership					
Avg. Daily Weekday	1,630,402	1,640,877	1,586,188	1,539,383	1,481,513
Avg. Daily Saturday	1,044,918	1,027,863	972,640	933,598	890,038
Avg. Daily Sunday	760,839	760,212	718,557	687,730	656,151
System Wide Ridership	514,216,813	515,964,831	497,704,252	480,126,530	462,124,514
Expense					
Top Operator Rate	$31.70	$32.82	$32.82	$32.82	$32.82
Capital Expenditures	$859,519,636	$734,716,432	$586,884,434	$583,934,999	$897,287,430
Revenue					
Avg. Fare per Trip	$1.13	$1.14	$1.16	$1.17	$1.26
Public Funding per Trip	$1.44	$1.54	$1.63	$1.66	$1.75

[Graph: Bar graph Systemwide Ridership from 2013 to 2018]

Year	System Wide Ridership
2014 Actual	514,216,813
2015 Actual	515,964,831
2016 Actual	497,704,252
2017 Forecast	480,126,530
2018 Budget	462,124,514

[Table: Bus Operating Statistics; Expense, Miles, Trips, Vehicles 2014-2016 Actuals, 2017 Forecast, 2018 Budget]

Characteristics	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Budget
Expense					
Scheduled Transportation Expense	$374,664,340	$375,580,292	$390,180,472	$391,872,935	$388,583,217
Garage Maintenance Expense	$139,843,950	$135,520,844	$121,703,808	$121,423,214	$125,484,518
Support Expense	$19,159,371	$19,169,749	$20,581,964	$21,347,790	$22,976,025
Heavy Maintenance Expense	$46,604,203	$47,551,843	$48,960,717	$51,641,708	$52,780,479
Other Expenses	$28,636,913	$32,695,705	$29,399,134	$26,983,202	$31,671,146
Total Operating Expense	**$608,908,777**	**$610,518,432**	**$610,826,094**	**$613,268,848**	**$621,495,386**
Fuel Expense	$59,476,423	$49,829,780	$32,738,322	$29,826,541	$33,575,516
Miles					
Annual Vehicle Revenue Miles	52,380,315	52,277,748	52,304,804	52,628,813	52,757,754
Trips					
Annual Unlinked Trips	276,116,759	274,288,766	259,058,440	248,919,371	237,212,819
Vehicles					
Annual Vehicle Revenue Hours	5,684,638	5,729,637	5,758,937	5,807,616	5,821,845
Vehicles Operated in Maximum Service	1,941	1,888	1,869	1,864	1,864
Vehicles Owned by CTA	2,038	1,990	2,121	2,159	2,159
Average Age of Vehicles	7.1	7.5	7.1	8.1	9.1

[Graph: Bar Graph Annual Bus Vehicle Revenue Hours 2014 to 2018]

Year	Revenue Hours
2014 Actual	5,684,638
2015 Actual	5,729,637
2016 Actual	5,758,937
2017 Forecast	5,807,616
2018 Budget	5,821,845

[Table: Heavy Rail Operating Statistics; Ridership, Expense, Revenue 2014-2016 Actual, 2017 Forecast, 2018 Budget]

Characteristics	2014 Actual	2015 Actual	2016 Actual	2017 Forecast	2018 Budget
Expense					
Scheduled Transportation Expense	$149,317,748	$154,659,250	$161,614,738	$162,423,606	$162,640,972
Terminal Maintenance Expense	$49,456,644	$49,078,596	$48,938,815	$52,583,982	$54,200,437
Support Expense	$36,982,321	$41,134,476	$41,617,321	$41,829,875	$47,170,826
Heavy Maintenance Expense	$19,033,791	$19,281,847	$18,790,060	$20,507,041	$20,036,022
Rail Car Appearance Expense	$12,567,050	$13,135,097	$14,964,653	$14,767,156	$15,134,278
Other Expenses	$8,414,478	$9,169,666	$10,483,985	$10,744,188	$12,491,695
Total Operating Expense	**$275,772,031**	**$286,458,931**	**$296,409,572**	**$302,855,848**	**$311,674,230**
Power Expense	$33,567,876	$28,817,929	$29,282,792	$29,099,397	$31,368,833
Miles					
Annual Rail Car Revenue Miles	70,679,582	71,297,563	71,811,535	74,162,573	74,114,367
Trips					
Annual Unlinked Trips	238,100,054	241,676,065	238,645,812	231,207,159	224,911,695
Vehicles					
Annual Train Revenue Hours	644,733	663,942	674,258	680,199	679,757
Vehicles Operated in Maximum Service	1,406	1,470	1,458	1,456	1,456
Vehicles Owned by CTA	1,445	1,496	1,486	1,486	1,486
Average Age of Vehicles	18	18	16	17	18

[Graph: Bar Graph Annual Train Revenue Hours]

Year	Revenue Hours
2014 Actual	644,733
2015 Actual	663,942
2016 Actual	674,258
2017 Forecast	680,199
2018 Budget	679,757

Performance Management at the CTA

The CTA's performance management process is designed to improve efficiency, promote accountability, and enhance the experience of our customers. Performance management is a systematic process involving all departments and employees in the accomplishment of the agency's goals. While some departments have more direct contact with the public than others, the CTA recognizes that all departments are interconnected and that individual performance affects the organization's ability to meet its goals.

Performance management allows the CTA to focus its limited resources to fulfill its mission to provide transit service. CTA's Performance Management department segments CTA goals into the following areas:

[Table with performance areas and definitions]

Safe	The CTA will minimize the number of accidents involving customers, employees, and the general public.
On-Time	The CTA will reduce system delays and successfully manage intervals between its vehicles to provide predictable and reliable service for customers. Construction and other projects will be completed within the allocated budget and time frame to minimize impacts to consumers.
Clean	The CTA will maintain and strive to improve the cleanliness of all vehicles, stations, and work areas to provide a safe and comfortable atmosphere for riders.
Courteous	The CTA will maintain the highest standards of customer service through timely, reliable, and clear communication with customers, considerate employees, and efficient operational practices.
Efficient	The CTA will responsibly and effectively manage resources to boost performance and provide safe, reliable, and affordable transit for customers.

Each department throughout the agency is responsible for focusing its resources to meet these goals. Performance Management establishes a level of accountability necessary throughout the organization by requiring that all departments establish results-oriented measures—both financial and non-financial—that are aligned with these goals. Results are continually monitored throughout the year and, based on these results, resources and programs are adjusted to enhance outcomes where necessary and possible.

[Table with CTA key performance indicators]

CTA Preliminary Monthly Performance (*)	2017 Monthly Target	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017

CTA FY18 Budget

Performance Management

RIDERSHIP	Total Ridership (in millions)	**41.4**	**37.5**	**37.2**	**41.8**	**38.7**	**41.8**	**41.6**	**39.2**
	Rail Ridership (in millions)	**21.7**	**17.9**	**17.3**	**19.6**	**18.6**	**19.9**	**20.5**	**19.4**
	Bus Ridership (in millions)	**19.7**	**19.6**	**19.9**	**22.1**	**20.1**	**21.9**	**21.1**	**19.8**
	Total (Year to Date, in millions)	**287.8**	**37.5**	**74.6**	**116.4**	**155.1**	**196.9**	**238.5**	**277.7**
	% Change Over Prior Year (Year to Date)	**-0.8%**	**-3.7%**	**-5.5%**	**-5.1%**	**-5.5%**	**-4.7%**	**-4.3%**	**-4.3%**
ON-TIME	Rail Delays of 10 Minutes or More	**78**	**84**	**66**	**88**	**73**	**69**	**105**	**78**
	% of Slow Zone Mileage	**N/A**	**8.1%**	**8.2%**	**8.0%**	**7.9%**	**7.6%**	**7.9%**	**8.2%**
	% of Big Gap Intervals, Bus	**4.0%**	**2.1%**	**2.1%**	**2.4%**	**2.3%**	**2.9%**	**3.3%**	**3.0%**
	% of Bunched Intervals, Bus	**3.0%**	**2.4%**	**2.6%**	**2.9%**	**2.7%**	**3.3%**	**3.6%**	**2.7%**
EFFICIENT	Mean Miles Between Reported Rail Vehicle Defects	**3,950**	**9,193**	**10,376**	**10,043**	**9,362**	**8,414**	**7,761**	**7,436**
	Miles Between Reported Bus Service Disruptions Due to Equipment	**5,000**	**4,857**	**6,742**	**5,626**	**4,954**	**5,037**	**5,160**	**6,209**
	Average Daily Percent of Bus Fleet Unavailable for Service	**12.6%**	**11.9%**	**12.7%**	**13.0%**	**13.2%**	**13.6%**	**14.6%**	**14.4%**
	Average Daily Percent of Rail Fleet Unavailable for Service	**11.0%**	**9.4%**	**9.5%**	**8.8%**	**8.9%**	**8.2%**	**8.9%**	**10.7%**
SAFE	Bus NTD Security-Related Incidents per 100,000 miles	**N/A**	**0.09**	**0.15**	**0.20**	**0.16**	**0.18**	**0.07**	**0.05**
	Rail NTD Security-Related Incidents per 100,000 miles	**N/A**	**0.07**	**0.09**	**0.13**	**0.08**	**0.09**	**0.13**	**0.10**
	Bus NTD Safety-Related Incidents per 100,000 Miles	**N/A**	**0.36**	**0.67**	**0.40**	**0.31**	**0.54**	**0.66**	**0.51**
	Rail NTD Safety-Related Incidents per 100,000 Miles	**N/A**	**0.08**	**0.05**	**0.02**	**0.02**	**0.05**	**0.03**	**0.05**
CLEAN	Average Interior Rail Clean Inspection Score	**90.0%**	**95.5%**	**95.0%**	**95.2%**	**95.0%**	**93.5%**	**92.0%**	**93.1%**
	Average Interior Bus Clean Inspection Score	**85.0%**	**84.9%**	**85.7%**	**86.0%**	**86.0%**	**85.9%**	**83.0%**	**86.0%**
COURTEOUS	% of Customer Complaints Not Closed Out Within 14 Days	**3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
	CTA Customer Service Hotline Average Wait-time (†)	**0:02:00**	**0:00:11**	**0:00:10**	**0:00:12**	**0:00:09**	**0:00:09**	**0:00:11**	**0:00:11**
	Reported Ramp Defects (Service Disruptions)	**N/A**	**86**	**116**	**102**	**129**	**154**	**109**	**140**

	% Buses with Defective AVAS	**2.0%**	**0.5%**	**0.4%**	**0.5%**	**0.4%**	**0.4%**	**0.4%**	**0.5%**
	Reported ADA Complaints	**N/A**	**43**	**48**	**53**	**52**	**79**	**64**	**89**

Definitions of CTA Monthly Performance Metrics

	CTA Monthly Performance Metrics	Definition
RIDERSHIP	**Total Ridership (monthly, in millions)**	Number of rides registered on the bus and rail systems.
	Rail Ridership (monthly, in millions)	Number of rides registered on the rail system.
	Bus Ridership (monthly, in millions)	Number of rides registered on the bus system.
	Total (Year to Date, in millions)	Number of rides registered on the bus and rail systems, year to date.
	% Change Over Prior Year (Year to Date)	Number of rides registered on the bus and rail systems, year to date (including rail-to-rail transfers) divided by the number of rides registered on the bus and rail systems previous year, year to date.
ON-TIME	**Rail Delays of Ten Minutes or More**	Rail delays of ten minutes or more reported to the Control Center by an Operator, a Controller, or a Supervisor.
	% of Slow Zone Mileage	Miles of revenue track that have slow zones. Slow zones range from 6 mph to 35 mph.
	% of Big Gap Intervals, Bus	Number of bus intervals (time between two buses at a bus stop) that are double the scheduled interval and greater than 15 minutes, divided by the total number of weekday bus intervals traveled during the month.
	% of Bunched Intervals, Bus	Number of bus intervals (time between two buses at a bus stop) that are 60 seconds or less divided by the total number of weekday bus intervals traveled during the month.

CTA Monthly Performance Metrics [continued]	Definition

Performance Management

	CTA Monthly Performance Metrics [continued]	Definition
EFFICIENT	**Mean Miles Between Reported Rail Vehicle Defects**	Miles traveled during the month divided by the number of reported defects for the month.
	Miles Between Reported Bus Service Disruptions Due to Equipment	Miles traveled during the month divided by number of reported service disruptions due to equipment for the month.
	Average Daily Percent of Bus Fleet Unavailable for Service	Daily average number of buses unavailable for service for any reason divided by the total number of buses in the fleet.
	Average Daily Percent of Rail Fleet Unavailable for Service	Daily average number of rail cars unavailable for service for any reason divided by the total number of rail cars in the fleet.
SAFE	**Bus National Transportation Database (NTD) Security-Related Incidents per 100,000 miles**	Number of occurrences of bomb threats, robbery, larceny, burglary or arrests/citations for fare evasion, trespassing, vandalism and assault on the bus system divided by traveled miles divided by 100,000.
	Rail NTD Security-Related Incidents per 100,000 miles	Number of occurrences of bomb threats, robbery, larceny, burglary or arrests/citations for fare evasion, trespassing, vandalism, and assault on the rail system divided by traveled miles divided by 100,000.
	Bus NTD Safety-Related Incidents per 100,000 Miles	Any event where one or more of the following occurs on the bus system: Individual dies at the time or within 30 days of the event; one or more persons suffer bodily damage as a result of the event requiring immediate medical attention away from the scene; property damage in excess of $25,000.
	Rail NTD Safety-Related Incidents per 100,000 Miles	Any event where one or more of the following occurs on the rail system: Individual dies either at the time or within 30 days of the event; one or more persons suffer bodily damage as a result of the event requiring immediate medical attention away from the scene; property damage in excess of $25,000.

Performance Management

CLEAN	**Average Interior Rail Clean Inspection Score**	Combined average of all the months' cleanliness scores for rail cars as tabulated by the Quality Inspection Department
CLEAN	**Average Interior Bus Clean Inspection Score**	Combined average of all the months' cleanliness scores for buses as tabulated by the Quality Inspection Department
COURTEOUS	**% of Customer Complaints Not Closed Out Within 14 Days**	Number of open and overdue complaints (complaints not closed out by a department within 14 days) as of the last day of the month divided by the total number of complaints received during that month.
COURTEOUS	**CTA Customer Service Hotline Average Wait-time**	Average number of minutes a customer waits on the CTA hotline before his/her call is answered.
COURTEOUS	**Reported Ramp Defects (Service Disruptions)**	Number of reported ramp defects that resulted in a disruption of service.
COURTEOUS	**% Buses with Defective Automatic Voice Annunciation System (AVAS)**	The percent of buses experiencing navigation issues (not calling out stops for at least part of the day), broken operator log-on screens, odometers reporting zero distance, and Bus Link issues, meaning no data will be received from the bus. This does not measure defective destination signs.
COURTEOUS	**Reported ADA Complaints**	Number of reported complaints to Customer Service identified as ADA-related.

Department Overviews and Facts

CTA-wide

Service Area & Population

- 308.5 square miles of Chicago and 35 nearby suburbs.
- The service area has 3.3 million people.

Ridership

- Over 480.1 million trips projected for 2017.
- Approximately 1.54 million trips per average weekday.

Operations Departments

Performance Management

Bus Operations and Maintenance

- On average, provides 798,286 rides per weekday.
- Maintains reliable service with over 4,000 bus operators driving 1,864 buses traveling 161,192 miles each weekday over 125 routes serving 10,768 bus stops.
- Manages seven Bus Garages and one Heavy Maintenance Shop.
- At the end of 2016, the average age of the fleet was 7.5 years old.

Rail Operations and Maintenance

- On average, provides 741,098 station entries per weekday.
- Maintains reliable service with over 1,000 rail operators and 1,456 rail cars traveling 233,906 miles each weekday over 224 miles of track across eight lines serving 145 stations.
- Rail Operations manages twelve terminals, of which nine are also managed by Rail Maintenance. Rail Maintenance also operates one Heavy Maintenance Shop.
- At the end of 2016, the average age of the fleet was 17.2 years old.

Facilities Maintenance Department

Facilities Maintenance

- Cleans and maintains more than 210 locations, including rail stations, terminals, bus garages, and rail shops.
- Completes life safety requirements per applicable codes for systems requiring mandated testing, maintenance, and inspections.

Performance Management

Infrastructure Department

Power & Way Maintenance

- Inspects and maintains 224.1 miles of revenue track approximately every seven days, 86.2 miles of elevated structure once every two years, and the full length of contact rail ("third rail") two times per year.
- Inspects and maintains 813 signals; 1,064 rail track switches; 1,835 track circuits; and over 24,000 vital signal relays.
- Responsible for all power substations, including maintaining all traction and contact rail power distribution, including 600 miles of traction power cable.

Construction

- Responsible for ensuring that major capital construction projects related to CTA track, structure, power, signal, rail stations, and rail and bus maintenance facilities are delivered on time, on budget, and conform with all applicable standards, regulations, and requirements.
- Responsible for overseeing and integrating program management and construction management services to assist in the monitoring and control of multiple capital construction projects.
- Responsible for developing uniform procedures and processes that assist in the design, construction, and administration of the capital program.
- Responsible for overseeing construction projects that are performed by other organizations (IDOT, CDOT, etc.) and impact the CTA system, as well as other private work adjacent to the CTA system.

Engineering

- Responsible for providing technical support to Power & Way Maintenance.
- Responsible for developing and maintaining the technical standards for track, structure, power, signal, rail stations, and other transit support facilities.
- Responsible for maintaining the engineering records and "as built" drawings.
- Responsible for CTA utilities, including traction power, water, and gas at CTA locations.
- Responsible for supporting the capital program and providing capital design project management as needed.
- Responsible for preparing design packages for CTA construction projects including projects constructed by CTA forces, JOC Contractors, and General Contractors.
- Responsible for representing CTA on all engineering issues associated with work performed by other agencies or private entities that may impact CTA's infrastructure or operations.
- Responsible for ensuring that quality processes are developed and followed for all construction, maintenance, and procurement activities.

Administration Operations Support Departments

Purchasing & Supply Chain

- Purchasing processes over 1,000 contracts covering hundreds of millions of dollars in annual expenditure to secure the best prices and ensure the most responsible use of CTA funds, as well as adherence to all funding agencies' regulations.

- Supply Chain Operations is responsible for the efficient stocking, managing, and distribution of material and supplies to all CTA maintenance facilities and stock rooms throughout the service network.

Technology Management

- Maintains, supports, and upgrades all CTA technology infrastructure, including computer hardware, application software, and communications equipment.
- Responsible for all communication system infrastructure.
- Manages and delivers technology projects to modernize and increase the efficiency of how the CTA operates, and provides greater convenience and safety to customers.

Safety

- Reviews, monitors, and assesses all CTA activities and responsibilities related to the provision of safe service and a safe workplace.
- Establishes and documents CTA safety policies.
- Identifies hazards through inspections, investigations, observations, and audits, as well as by creating and maintaining systems that encourage reporting of hazards by all personnel.
- Assesses safety risk and develops recommendations and corrective action plans to reduce risk.
- Tracks and verifies the implementation of corrective action plans and the effectiveness of ongoing management routines that support safety. Escalates issues and assists in identifying and assigning resources to reduce risk.
- Ensures compliance with all applicable transit and safety laws and regulations.
- Promotes safety through CTA's employee training, instruction programs, and employee engagement.
- Selected by the Federal Transit Administration (FTA) to pilot the adoption of a new national safety regulatory framework and performance criteria for transit: Safety Management System (SMS).

Communications (includes Customer Service)

- Customer Service provides a number of services including intake, analysis, customer concern routing to the appropriate department, customer refunds, travel information, maps and brochures, and support for onsite public forums.
- Compiles customer feedback that is obtained via an inbound call center at 1-888-YOUR-CTA, the primary customer service e-mail address (feedback@transitchicago.com), the website (www.transitchicago.com), and through U.S. mail. Call volume averages 275 calls daily, and the Customer Feedback Programs group responds to an average of 162 emails daily.

2017 Performance by Department

Bus Operations

Bus Operations provides almost 249 million rides per year, or over 50% of all rides taken on the CTA system. Customers rely on the CTA's buses daily for commuting to and from work, as well as for errands and recreational trips. The CTA recognizes that customers value frequent, on-time service.

Performance Management

To ensure that customers can depend on buses running on-time, Bus Operations continually monitors the reliability of service. One measure that is tracked regularly is the number of "big gaps" experienced by CTA customers each day. A "big gap" is defined as an instance when the interval between buses is 15 minutes (or more) and two times the scheduled interval.

Bus Operations hosts weekly and monthly discussion sessions with bus operators regarding service reliability and also works with Bus Service Management (BSM) to coordinate service. In addition, BSM leverages technology such as Bus Tracker, Real Time Bus Management (RTBM), and a new Bus Emergency Communication System (CleverCAD) to monitor the routes and make real-time adjustments to service. Bus Operations works with the Control Center to utilize CleverCAD to send real-time messages to bus operators.

Through July of 2017, Bus Operations maintained a big gaps average of 2.6%, which is well below the 2017 target of 4%. Bunched intervals have also averaged 2.6% in 2017 through July, below the year's target of 3%. The department is continuously examining new approaches to improve this number in order to make gains on the target by the end of the year.

Bus Operations Performance Measures	2017 Target	2017 YTD Performance (Jan-July)	Service Level with Proposed Budget
% of Big Gap Intervals	4.0%	2.6%	4.0%
% Bunched Intervals	3.0%	2.6%	3.0%

Bus Maintenance

The safety and reliability of buses is paramount. Bus Maintenance is responsible for the maintenance of the CTA bus fleet, composed of 1,864 buses. This includes both mechanical maintenance and regular cleaning of bus interiors and exteriors.

The CTA has completed the receipt of the base order of 300 new Nova 7900 Series buses. An additional option order of 125 buses has been fully executed. The oldest buses in the current fleet, the Nova 6400 Series, are currently being replaced by the 7900 Series. To date, only 103 buses remain out of the 484 original 6400 Series order.

In February 2016, Bus Maintenance implemented the use of CleverCAD to better track all reported defects and road calls. Bus Maintenance now reports Total Maintenance Defects to include defects and road calls in one statistic. Therefore, the CTA is now reporting Mean Miles between Defects (MMBD) to include all defects and service disruptions (road calls, RCs) reported by the Control Center. As part of the

Performance Management

performance management process, Bus Maintenance set a goal of providing a fleet reliability of 4,200 miles between defects in 2017. A defect is classified as any failure that requires the bus to be inspected or repaired by a bus mechanic outside of its normal inspection cycle.

In 2014, the CTA began tracking both Mean Miles between Defects as well as Mean Miles between Road Calls (MMBRC - service disruptions). The target for MMBRC is set at 5,000 miles between Road Calls (service disruptions). Bus Maintenance has achieved an improvement in the MMBRC to an average of slightly over that target in 2017 YTD. For comparison, in early 2009, the bus fleet was running an average of only about 2,500 miles between service disruptions.

Bus Maintenance Performance Measures	2017 Target	2017 YTD Performance (Jan-July)	Service Level with Proposed Budget
Mean Miles between Road Calls	5,000	5,381	5,000
Bus General Clean Quality Inspection Score	85%	85.1%	85%

[Table with mean miles between road calls by month for 2015 to 2017. The 2017 target is given 5,000 in a month]

Month	2015	2016	2017	2017 Target
Jan	14108	75564	4857	5,000
Feb	11764	75942	6742	5,000
Mar		70466	5626	5,000
Apr		8844	4955	5,

		5	4	000
May	9440	8620	5037	5,000
Jun	7585	7384	5031	5,000
Jul	8333	7047	5847	5,000
Aug	8,172	6,385		5,000
Sep	9,918	7,444		5,000
Oct	10,158	5,786		5,000
Nov	9,461	6,070		5,000
De	9	4		5

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Note: Data missing in March and April 2015 due to system unavailability.

Rail Operations

The Rail Operations division is committed to being the top performer in the industry, while maintaining a safe work environment and being accountable in all aspects of its daily operation. It strives to deliver quality service that exceeds customers' expectations.

In order to constantly improve the rail customer's experience, a top priority for Rail Operations is to focus on reducing major delays (delays to service that exceed ten minutes). The target in 2017 was 78 or fewer major delays per month that can be attributed to Rail Operations, Rail Maintenance, and Power & Way. The average number of monthly major delays from January to July 2017 was 75, or 4% under the target. In 2016, the average number of major delays was 75, or 4% under the target. In 2015, the average number of major delays was 58, or 26% under the target.

[Table with major delays by month and year 2015-2017. The target is 78 in a given month.]

	2015	2016	2017	2017 Target
Jan	82	66	84	78
Feb	77	47	66	78
Mar	58	82	88	78
Apr	29	73	73	78
May	42	67	69	78
Jun	50	96	83	78
Jul	62	109	63	78
Aug	47	95		78
Sep	59	61		78
Oct	63	58		78
Nov	64	57		78
Dec	59	84		78

Rail Maintenance

Rail Maintenance is responsible for maintaining the safe mechanical functioning of CTA trains, as well as for regular cleaning and heavy maintenance repairs or rebuilds of train systems. A well-maintained, clean train minimizes delays and provides a safe and comfortable environment for passengers.

Rail Maintenance continues to focus on improving the Mean Miles between Vehicle Defects (the average miles a train runs before encountering a defect to one of its systems). This focus includes improving the

preventive maintenance process and reducing the most common defects, as well as repeat defects (a defect that repeats within 30 days of the original defect).

[Table: rail mean miles between defects]

Month	2015	2016	2017	2017 Target
Jan	6,173	8,946	9,193	3,950
Feb	5,893	10,302	10,376	3,950
Mar	8,085	11,463	10,043	3,950
Apr	8,369	11,175	9,362	3,950
May	8,354	10,996	8,414	3,950
Jun	8,020	8,926	7,791	3,950
Jul	7,645	8,548	7,444	3,950
Aug	7,613	8,088		3,950
Sep	8,286	9,699		3,950
Oct	9,150	10,265		3,950
Nov	9,753	11,197		3,950
Dec	10,543	8,709		3,950

Due to Rail Maintenance's focus on reliability, the introduction of additional new 5000 Series cars through 2015, and the continued retirement of the oldest series of cars, we have seen Mean Miles between Defects increase to an average of 8,946 miles year-to-date through July 2017 (compared to just 7,506 miles in the same time frame in 2015 and 10,295 miles in 2016). In 2015, the CTA raised the target for this metric from 3,950 to 5,400; in 2016, the target was raised to 8,000 miles to promote continued improvements. The 3200 Series C-Level Overhaul, which began late 2015 and continues in 2017, is expected to further enhance the performance and reliability of the CTA rail fleet. Another step in this progression will be the addition of the 7000 Series fleet; this will allow the Authority to retire the oldest 2600 Series cars, which were delivered in the early 1980s. With the addition of these cars, Rail Maintenance will have a younger and more recently overhauled fleet.

Rail Maintenance Performance Measures	2017 Target	2017 YTD Performance (Jan-July)	Service Level with Proposed Budget
Mean Miles Between Defects	8,000	8,946	8,000

Rail General Clean Quality Inspection Score	90%	94.2%	90%

Power & Way

Power & Way is responsible for maintaining rail infrastructure, including the track, structure, power, and signal systems. As part of the performance management process, a large focus for Power & Way has been minimizing slow zones across the rail system. Replacing or repairing old rails and ties reduces slow zones and makes rail customers' trips quicker, safer, and more comfortable.

[Table: slow zones with columns for month (May 2014 to July 2017), lineal feet of slow zones and percent of total lineal feet]

Month	Total Lineal Feet of Slow Zone	% of Total Lineal Feet
May-14	154,588	13.1%
Jun-14	148,496	12.6%
Jul-14	113,871	9.7%
Aug-14	106,288	9.0%
Sep-14	116,968	9.9%
Oct-14	112,268	9.5%
Nov-14	111,239	9.5%
Dec-14	103,233	8.8%
Jan-15	99,668	8.5%
Feb-15	98,307	8.4%
Mar-15	91,707	7.8%
Apr-15	102,350	8.7%
May-15	101,521	8.6%
Jun-15	96,551	8.2%
Jul-15	100,392	8.5%
Aug-15	104,312	8.9%
Sep-15	108,232	9.2%
Oct-15	112,364	9.6%
Nov-15	91,034	7.7%
Dec-15	59,490	5.1%
Jan-16	61,003	5.2%
Feb-16	64,363	5.5%
Mar-16	59,332	5.0%
Apr-16	59,389	5.0%

May-16	61,818	5.3%
Jun-16	64,245	5.5%
Jul-16	73,850	6.3%
Aug-16	77,364	6.60%
Sep-16	86,540	7.40%
Oct-16	108,081	9.10%
Nov-16	116,023	9.90%
Dec-16	115,186	9.80%
Jan-17	95,765	8.10%
Feb-17	96,757	8.20%
Mar-17	93,686	8.00%
Apr-17	92,813	7.90%
May-17	89,744	7.60%
Jun-17	92,567	7.90%
Jul-17	100,609	8.60%

Facilities Maintenance

Facilities Maintenance operates, maintains, repairs, and cleans CTA properties and equipment. CTA Facilities Maintenance provides the personnel and supervision to remodel, rehabilitate, construct, and install facilities, offices, equipment, and devices throughout its approximately 5,000,000 square feet of CTA property, at an average cost of $0.76 per square foot. This is done in a cost-efficient manner for both the general public and CTA departments, permitting the Authority to provide a safe, functional, healthy, and clean environment.

An important function of Facilities Maintenance is maintaining elevators and escalators to ensure customer comfort and accessibility. Escalators are maintained in-house, while elevators are inspected and maintained by an independent third-party contractor.

[Table: elevator up-time by month 2014-2017. Target is 98%]

ELEVATOR					
	2014	2015	2016	2017	2017 Target
Jan	98%	98%	99%	99%	98%
Feb	98%	99%	99%	99%	98%
Mar	97%	100%	100%	99%	98%
Apr	97%	99%	100%	99%	98%
May	98%	98%	100%	99%	98%
Jun	97%	98%	99%	99%	98%
Jul	97%	99%	100%	99%	98%
Aug	97%	99%	98%		98%

Sep	98%	99%	99%		98%
Oct	99%	99%	99%		98%
Nov	99%	99%	99%		98%
Dec	99%	99%	99%		98%

[Table: escalator up-time by month 2014-2017. Target is 98%]

ESCALATOR					
	2014	2015	2016	2017	2017 Target
Jan	95%	96%	98%	97%	96%
Feb	94%	96%	96%	96%	96%
Mar	96%	96%	97%	98%	96%
Apr	96%	98%	98%	98%	96%
May	93%	97%	97%	97%	96%
Jun	95%	97%	97%	96%	96%
Jul	93%	96%	97%	97%	96%
Aug	94%	98%	97%		96%
Sep	94%	96%	96%		96%
Oct	95%	96%	97%		96%
Nov	97%	97%	96%		96%
Dec	97%	96%	94%		96%

Escalator uptimes exceeded the target of 96% for the majority of 2016, with dips attributable to inclement weather in February and December, and have largely continued to exceed the target in 2017. Elevator uptimes have been at or above the increased target of 98% for all of 2016 and 2017 year-to-date.

Facilities Performance Measures	2017 Target	2017 Performance (Jan-July)	Service Level with Proposed Budget
Elevator Uptime	98.0%	99.1%	98.0%
Escalator Uptime	96.0%	97.0%	96.0%

Technology Management

The Technology Management Department provides necessary technology solutions and services to support the CTA and its riders. The Technology Management Department continues to expand and upgrade the security camera system that serves the Authority. Cameras in underground subway tunnels are being upgraded from analog technology to modern, high-definition digital technology, and all buses and rail cars now have on-board cameras that record activity. In addition, bus garages and rail yards have expanded camera coverage for enhanced safety and security.

Performance Management

CTA's underground cellular network was recently upgraded and modernized to provide continuous, reliable mobile phone service on all CTA subway platforms, mezzanines, and in tunnels. The upgraded network offers improved and more robust voice and high-speed data services and enhanced communication between CTA personnel and emergency responders. It replaced existing infrastructure that dated back to 2005, well before most modern smartphones and tablets were introduced. CTA is now the largest transit agency in North America that supports full 4G service from all major carriers in all underground areas of the subway, including stations, platforms, and tunnels.

In addition to technology infrastructure upgrades, the Technology Management Department is also responsible for the day-to-day reliability of CTA applications and online customer-facing tools, including the Bus and Train Trackers. CTA Tracker information is now available to riders by e-mail, text messaging, and online. In 2016 alone, there were nearly 34 million Bus Tracker requests.

Riders can access CTA Bus and Rail Tracker, along with instructions on how to receive notifications by e-mail or text message, on the CTA website at www.transitchicago.com.

Safety

Safety

Technology Performance Measure	2017 Target	2017 YTD Performance (Jan-July)	Service Level with Proposed Budget
Bus Tracker Application Availability	99.5%	99.5%	99.5%
Train Tracker Application Availability	99.5%	100.0%	99.5%

Management System (SMS)

In 2014, the Federal Transit Administration (FTA) chose the CTA as the first transit agency in the nation to assist in developing a Safety Management System (SMS) for transit. Through SMS, the FTA will develop uniform standards to upgrade and ensure safety for transit operations throughout the country. The CTA will also integrate its safety guidelines, policies, and processes to help identify and mitigate risk, to ensure that safety systems are both employed and effective, and to promote a robust safety culture. SMS is a top-down approach, supported by safety-focused activities at every level of the organization.

In 2016, the CTA President issued an executive order to CTA employees. It states, "Safety is a core value of the CTA, and managing safety is a core business function of the Authority. The CTA is committed to developing, implementing, maintaining, and continuously improving processes to ensure the safety of its customers, employees, and the public. The CTA will use safety management processes to direct the prioritization of safety and allocate its organizational resources – people, processes, or technology – in balance with its other core business functions. CTA aims to support a robust safety culture, and achieve the highest level of safety performance, meeting all established safety standards. All levels of management and all front-line employees are accountable for the delivery of the highest level of safety performance, starting with the President of the CTA."

The President's statement provides further detail in the following areas:

- Executive Commitment
- Communication & Training

Performance Management

- Responsibility & Accountability
- Responsibility of Employees & Contractors
- Employee Reporting
- Performance Monitoring & Measuring
- Review & Evaluation

Communications and Marketing

The CTA's Communications and Marketing Department is responsible for a wide range of communications and marketing functions, all designed to provide clear, concise, timely, and helpful information to CTA customers and Chicago and suburban residents. Communications has four business units: (1) Communications/Media Relations; (2) Customer Information; (3) Customer Service and (4) Marketing. Each unit uses various print, electronic, and telephonic channels to inform customers about CTA service, projects, and programs. Signs, messages, and announcements are designed to help customers understand and efficiently use CTA buses and trains in Chicago and its suburbs.

[Table: Customer service hotline wait times in hours-minutes-seconds. The target is 2 minutes.]

Month	2015	2016	2017	2017 Target
Jan	0:00:09	0:00:13	0:00:11	0:02:00
Feb	0:00:11	0:00:14	0:00:10	0:02:00
Mar	0:00:11	0:00:17	0:00:12	0:02:00
Apr	0:00:10	0:00:12	0:00:09	0:02:00
May	0:00:13	0:00:11	0:00:09	0:02:00
Jun	0:00:12	0:00:13	0:00:11	0:02:00
Jul	0:00:11	0:00:12	0:00:11	0:02:00
Aug	0:00:12	0:00:11		0:02:00
Sep	0:00:12	0:00:13		0:02:00
Oct	0:00:10	0:00:11		0:02:00
Nov	0:00:11	0:00:12		0:02:00
Dec	0:00:12	0:00:10		0:02:00

Communications/Media Relations prepares a wide range of communications materials, from collateral materials to responses to media outlets. Customer Information is responsible for all customer-facing communications efforts, from signage, wayfinding, and publications such as maps and brochures, to digital display screens and other electronic channels, including all CTA social media channels. The department also manages CTA's graphic branding and standards.

Customer Service provides a number of services including intake, analysis, and routing of customer concerns; customer refunds; travel information; maps and brochures; and support for onsite public forums. The department manages CTA's Customer Service hotline, 1-888-YOUR-CTA, and e-mail address (feedback@transitchicago.com). These channels allow customers to receive information about CTA service and provide feedback on the quality of their experience. The CTA recognizes that when customers call or e-mail our Customer Service channels, they expect prompt and courteous service. The

Performance Management

Customer Service hotline was held to a wait-time target of two minutes in 2017 and has consistently exceeded that target.

Communications Performance Measures	2017 Target	2017 YTD Performance (Jan-July)	2018 Service Level with Proposed Budget
Average Call Response Time (Overall)	2:00	0:10	2:00
Average Call Response Time (General Inquiries)	2:00	0:10	2:00

Peer Comparison

Overview

To illustrate the CTA's performance in relation to its peers, the following comparative performance analysis utilizes the 2015 National Transit Database (NTD)[1]. The selection of comparison transit agencies is based upon the size of the urban area served, the urban characteristics of the service area, and the size of the transit system. The analysis is then conducted on a modal basis (i.e., bus and heavy rail). For each mode, the CTA is compared with five peers.

The comparison group includes:

MBTA	Massachusetts Bay Transportation Authority
NYCT	New York City Transit
SEPTA	Southeastern Pennsylvania Transportation Authority
WMATA	Washington Metropolitan Area Transit Authority
MARTA	Metropolitan Atlanta Rapid Transit Authority (for heavy rail comparison only)
LACMTA	Los Angeles County Metropolitan Transportation Authority (for bus comparison only)

Comparative Agency Profiles

Agency	City	Population of Service Area	Square Miles of Urban Area Served	Fleet Size	Rapid Rail Track Miles*
CTA	*Chicago*	*3,345,983*	*314*	*3,358*	***287.8***
MBTA	Boston	3,109,308	1,873	3,157	**108.0**
NYCT	New York	8,550,405	321	12,859	**832.5**
SEPTA	Philadelphia	3,797,325	839	2,831	**99.8**
WMATA	Washington, D.C.	3,719,567	950	3,699	**292.3**
MARTA	Atlanta	1,373,958	504	1,079	**103.7**
LACMTA	Los Angeles	8,626,817	1,513	4,143	**169.9**

** Total track mileage as listed in NTD Table 23.*

The comparative analysis measures performance in four areas: Service Efficiency, Cost Effectiveness, Service Maintenance and Reliability, and Service Level Solvency. Specific indicators are assigned to measure the performance in each dimension.

Definitions of Comparative Performance Measurement

Area	Indicator	Definition
Service	Operating Expense per Vehicle Revenue Mile	Total operating cost divided by the total number of miles that vehicles travel while in

[1] The data from NTD is self-reported by the participating transit agencies following guidelines and procedures established by the Federal Transit Administration.

Efficiency		revenue service.
	Operating Expense per Vehicle Revenue Hour	Total operating cost divided by the total number of hours of transit service provided.
Cost Effectiveness	Operating Expense per Passenger Mile	Total operating cost divided by the total number of miles traveled by passengers.
	Operating Expense per Unlinked Trip	Total operating cost divided by the total number of passengers boarding public transportation vehicles.
Service Maintenance & Reliability	Average Fleet Age	The mean of the difference between year of manufacture and year under consideration for all vehicles in the active fleet.
	Miles between Major Mechanical Failures	The average number of miles that vehicles travel while in revenue service between failures of some mechanical elements or a safety concern that prevents the vehicle from completing a scheduled trip or from starting the next scheduled trip.
Service Level Solvency	Fare Recovery Ratio[2]	The proportion of operating costs that are covered by fare revenue paid by passengers.
	Capital Funds Expended per Passenger Trip	Expenses related to the purchase of capital assets divided by the total number of unlinked passenger trips provided.

[2] The recovery ratio in this section follows the NTD definition. It differs from the calculation of the RTA recovery ratio, which is set forth in the RTA Act.

Urban Bus

Comparative Characteristics of Urban Bus

Numbers in millions unless otherwise noted	CTA Chicago	MBTA Boston	LACMTA Los Angeles	NYCT New York City	SEPTA Philadelphia	WMATA Washington D.C.
Operating Expense	$794	$406	$927	$2,663	$620	$621
Capital Funds Expended	$202	$76	$325	$303	$168	$263
Fare Revenue	$292	$96	$252	$871	$180	$146
Vehicle Revenue Miles	52.3	21.7	67.7	87.7	39.8	38.3
Vehicle Revenue Hours	5.7	2.2	6.4	12.4	3.9	3.9
Passenger Miles	669.6	314.2	1,315.8	1,559.6	502.6	421.9
Total Number of Unlinked Trips	274.3	121.6	318.4	743.7	171.3	132.9
Total Number of Mechanical Failures (thousands)	5.8	1.5	6.6	11.8	6.3	5.5

Service Efficiency

CTA urban bus had a lower operating expense per vehicle revenue mile and vehicle revenue hour than the peer averages, ranking the second most efficient for operating expense per vehicle revenue mile and the most efficient in operating expense per vehicle revenue hour.

Table: operating expense per vehicle revenue mile

Transit agency	Expense per Mile
LACMTA	$ 13.69
CTA	$ 15.18
SEPTA	$ 15.58
WMATA	$ 16.21
MBTA	$ 18.71
NYCT	$ 30.36

Table: operating expense per vehicle revenue hour

Transit agency	Expense per Hour
CTA	$ 139.68
LACMTA	$ 144.84
SEPTA	$ 158.97
WMATA	$ 159.23
MBTA	$

	183.82
NYCT	$ 214.76

Cost Effectiveness

Both measures show that CTA urban bus had better performance than the peer averages in the area of cost effectiveness. CTA ranked second lowest for operating expense per passenger mile and lowest for operating expense per unlinked trip.
Table: operating expense per passenger mile

Transit agency	Expense per Mile
LACMTA	$0.70
CTA	$1.19
SEPTA	$1.23
MBTA	$1.29
WMATA	$1.47
NYCT	$1.71

Table: operating expense per unlinked trip

Transit agency	Expense per unlinked trip
CTA	$ 2.89
LACMTA	$ 2.91
MBTA	$ 3.34
NYCT	$ 3.58
SEPTA	$ 3.62
WMATA	$ 4.67

Service Maintenance & Reliability

Due to an influx of new buses, the CTA had the second lowest fleet age in the peer group, coming in 1.2 years below the peer average of 8.7 years. However, the CTA ranked third from the bottom within its peer group for miles between major mechanical failures.
Table: average age of fleet

Transit agency	Age	Peer Average
NYCT	7.4	8.66
CTA	7.5	8.66
LACMTA	7.8	8.66
WMATA	8.1	8.66
SEPTA	9.2	8.66
MBTA	10.8	8.66

Table: miles between major mechanical failures

Transit agency	Mile	Peer Average
WMATA	77,400	153,995
SEPTA	79,778	153,995
CTA	115,448	153,995
NYCT	132,169	153,995
LACMTA	199,364	153,995
MBTA	281,267	153,995

Service Level Solvency

Solvency refers to the capability of meeting financial obligations, including covering long-term fixed expenses. Among its peers, the CTA achieved the highest level of bus fare recovery ratio. The CTA's level of capital funds expended per passenger trip was $0.08 below the peer average of $0.82.

Table: fare recovery ratio

Transit agency	Fare Recovery Ratio 2014	Peer Average
WMATA	24%	27%
MBTA	24%	27%
LACMTA	27%	27%
SEPTA	29%	27%
NYCT	33%	27%
CTA	37%	27%

Table: capital funds expended per passenger trip

Transit agency	Capital Funds Expended per Passenger Trip	Peer Average
LACTMA	$ 0.08	$ 0.82
NYCT	$ 0.41	$ 0.82
MBTA	$ 0.63	$ 0.82
CTA	$ 0.74	$ 0.82
SEPTA	$ 0.98	$ 0.82
WMATA	$ 1.98	$ 0.82

Heavy Rail

Comparative Characteristics of Heavy Rail

Numbers in millions unless otherwise noted	**CTA**	**MARTA**	**MBTA**	**NYCT**	**SEPTA**	**WMATA**
	Chicago	**Atlanta**	**Boston**	**New York City**	**Philadelphia**	**Washington D.C.**
Operating Expense	$569	$213	$349	$5,200	$189	$984
Capital Funds Expended	$289	$113	$156	$2,570	$73	$780
Fare Revenue	$299	$78	$215	$3,314	$107	$627
Vehicle Revenue Miles	71.3	22.2	22.4	345.4	17.1	85.5
Vehicle Revenue Hours	3.96	0.84	1.39	18.94	0.88	3.42
Passenger Miles	1,477.4	472.8	587.7	10,870.5	443.5	1,590.8
Total Number of Unlinked Trips	241.7	72.5	174.9	2,662.4	100.7	270.2
Total Number of Mechanical Failures (individual occurrences)	247	736	452	2,631	72	1,644

Service Efficiency

CTA heavy rail achieved superior service efficiency, ranking at the top for both operating expense per vehicle revenue mile and operating expense per vehicle revenue hour. The two indicators were 36.6 percent and 44.1 percent below the peer average, respectively.

[Graph: operating expense per vehicle revenue mile]

Transit Agency	Expense per Mile
CTA	$ 7.98
MARTA	$ 9.73
SEPTA	$ 11.08
WMATA	$ 11.51
NYCT	$ 15.06
MBTA	$ 15.58
Peer Average	$ 12.59

[Graph: operating expense per vehicle revenue hour]

Transit Agency	Expense per Hour
CTA	$ 143.69
SEPTA	$ 214.77
MBTA	$ 251.08
MARTA	$ 257.14
NYCT	$ 274.55
WMATA	$ 287.72
Peer Average	$ 257.05

Cost Effectiveness

CTA had the lowest operating expense per passenger mile among its peers, and it bested the peer average operating expense per unlinked trip by 14 cents.

[Graph: operating expense per passenger mile]

Transit Agency	Expense per Passenger Mile
CTA	$ 0.39
SEPTA	$ 0.43
MARTA	$ 0.46
NYCT	$ 0.48
MBTA	$ 0.59
WMATA	$ 0.62
Peer Average	$ 0.51

[Graph: operating expense per unlinked trip]

Transit Agency	Expense per Unlink Trip
SEPTA	$ 1.88
NYCT	$ 1.95
MBTA	$ 2.00
CTA	$ 2.35
MARTA	$ 2.98
WMATA	$ 3.64
Peer Average	$ 2.49

Service Maintenance & Reliability

The CTA's recent retirement of its oldest rail cars and an investment in new ones has significantly lowered the average age of the fleet, moving the CTA from the highest average fleet age in 2012 to the lowest in 2015. The CTA continued to excel in miles between major mechanical failures, exceeding the peer average by nearly 189 percent.

[Graph: average age of fleet]

Transit Agency	Average Age (in Years)
CTA	14.9
NYCT	21.6
SEPTA	22.7
WMATA	24.5
MARTA	25.8
MBTA	27.0
Peer Average	24.3

[Graph: miles between major mechanical failures]

Transit Agency	Number of Miles
MARTA	30,163
MBTA	49,558
WMATA	52,007
NYCT	131,281
SEPTA	236,856
CTA	288,664
Peer Average	99,973

Service Level Solvency

The CTA rail's fare recovery ratio was second from the bottom of its peer group, while capital funds expended per passenger trip was $0.46 lower than the peer average of $1.66.

[Graph: Fare recovery ratio]

Transit Agency	Fare Recovery Ratio
MARTA	36.1%
CTA	52.5%
SEPTA	56.6%
MBTA	61.6%
WMATA	63.7%
NYCT	63.7%
Peer Average	56.4%

[Graph: capital funds expended per passenger trip]

Transit Agency	Capital Funds Expended per Trip
SEPTA	$ 0.72
NYCT	$ 0.97
CTA	$ 1.20
MARTA	$ 1.56
MBTA	$ 2.15
WMATA	$ 2.89
Peer Average	$ 1.66

Sustainable Initiatives and Climate Change Impact at CTA

Sustainable Transportation

CTA's transit services provide region-wide environmental benefits while meeting the transportation needs of local riders and visitors alike, whether traveling to work, school, airports, hospitals, or other Chicago-area destinations. Each weekday, CTA replaces the equivalent of about 400,000 vehicles on regional roads. A full eight-car CTA train replaces more than 600 cars, and a full 60-foot articulated CTA bus replaces more than 70 cars.

By offering riders an alternative to driving, CTA provides the direct benefits of reduced traffic congestion, lower energy consumption, and improved air quality through decreased vehicle emissions. CTA's bus and rail systems also enable compact development, which is a more efficient pattern of land use than urban sprawl. Compact development shortens commuting distances and times, reduces the need for individual car ownership, encourages vibrant neighborhoods, and makes the most efficient use of land and energy resources.

In addition to providing a sustainable mode of transportation, CTA is committed to making its own operations as green and energy efficient as possible. CTA continually seeks to improve its environmental footprint by utilizing efficient trains and buses, and by operating them in ways that conserve resources and minimize emissions and waste.

Clean Vehicles and Efficient Operations: CTA Rail System

CTA's electric rail service operates eight rails lines on 224.1 miles of track. It is a highly efficient motorized transport mode, operating on low-friction steel rails. On an average weekday, CTA provides more than 740,000 rides throughout the rail system.

In CTA's fleet of 1,456 rail cars, currently about half are the new 5000 Series model. The 5000 Series cars are the first in CTA's fleet to feature alternating-current (AC) propulsion systems with regenerative braking technology. This technology enables a train to regenerate electricity when it brakes. The regenerated electricity goes back into the third rail to power another train on the system that is accelerating at the same time. CTA estimates that the new 5000 Series cars reduce annual rail system electricity usage by at least 10 percent. As CTA integrated the 5000 Series rail cars into the fleet, it was able to retire the oldest and least energy efficient cars throughout the system.

CTA awarded a contract to CRRC Sifang America for production of the next model of rail cars, the 7000 Series, in March 2016. The 7000 Series rail cars, which will also feature regenerative braking, will eventually replace the remaining older half of CTA's existing rail fleet. Similar to the 5000 Series, the 7000 Series will feature additional energy efficient technologies including LED lighting, LED signage, and advanced controls for heating and air conditioning. In March 2017, CRRC Sifang America broke ground on the manufacturing facility where the 7000 Series rail cars will be built, located on South Torrence Avenue near East 136th Street.

In addition to purchasing new rail cars, CTA is overhauling older rail cars to extend their useful life, improve customer experience, and reduce energy usage. As of October 2017, CTA had completed two-thirds of the overhauls planned on 257 of the 3200 Series rail cars. In each rail car, the overhaul includes the replacement of more than 40 outdated incandescent and tube fluorescent lights with LED lights, which save energy and improve light quality and signage readability for CTA riders. CTA received over $71,000 in energy efficiency rebates from the State of Illinois for these lighting upgrades.

CTA's rail energy efficiency initiatives focus not only on vehicle equipment and technologies, but also on vehicles operations. In Q1 and Q2 2017, an inter-departmental team researched and analyzed opportunities to save electricity throughout the rail system by modifying everyday actions by CTA personnel. The team concentrated on two strategies: reducing the amount of time that rail cars remain powered on in the rail yards overnight, and disconnecting extra rail cars from trains during off-peak hours when shorter trains can accommodate ridership levels. Following this study, CTA is identifying ways to integrate energy savings awareness and practices into employee training and performance management. The study was funded by the Illinois Department of Commerce and Economic Opportunity's (DCEO) *Illinois Energy Now* energy efficiency program.

CTA was the beneficiary of an Illinois Department of Transportation (IDOT) Regional Green Transit Grant to RTA to study the feasibility of wayside energy storage on CTA's Red Line. The study, which took place in Q1 and Q2 of 2017, investigated the potential for installing an energy storage system on the side of the rail right-of-way to temporarily store and then reuse "excess" electricity captured from regenerative braking trains. The study's results showed that CTA's Red Line is already highly energy efficient due to its interconnectivity with other CTA rail lines and due to the conductivity of CTA's composite aluminum/steel third rail. While Red Line locations are cost-effective for energy storage today, the project consultant recommended considering energy storage on other less interconnected lines (e.g., the Blue and Orange Lines) in the future when regenerative braking trains are deployed to those lines. In addition to providing energy efficiency, a future wayside energy storage system could provide voltage support, power reliability, and revenues from participating in regional electric grid services.

Clean Vehicles and Efficient Operations: CTA Bus System

The CTA maintains a fleet of 1,864 buses that provide over 798,000 rides on an average weekday. In recent years, CTA has made strategic investments in the bus fleet to improve fuel efficiency, which reduces operating costs. These strategic investments include the purchase of 250 hybrid buses, representing about 13% of the total fleet. Investments in the CTA bus fleet also yield reductions in air pollutants that impair public health.

From 2014 through 2016, CTA added 425 new 40-foot, clean diesel buses to the bus fleet. The new buses, which replaced a portion of the older 6400 Series buses, have an estimated 20% improvement in fuel economy. The new buses also have about 90% lower emissions of key air pollutants than older models. According to the EPA's Diesel Emissions Quantifier Health Benefits Methodology, the reduction in particulate matter from the new fleet is equivalent to over $30 million in annual societal savings due to health benefits.

CTA is also retrofitting older buses to improve their energy efficiency and emissions. In May 2017, the CTA Board approved a contract for the mid-life overhaul of up to 208 4000 Series buses. The overhaul will include the installation of new electric fan radiator technology. Based on CTA testing of this technology over the past year, the new fans will result in an estimated 10% improvement in the buses' fuel economy.

CTA's midday bus storage program now includes storage of 36 buses across three downtown locations on weekdays between morning and evening rush periods. This represents a doubling in the size of the program based on success of the initial pilot, which launched in 2012 with 18 buses. Midday bus storage has saved the CTA approximately 185,000 miles of "deadhead" travel and 54,000 gallons of diesel fuel annually. Additionally, the program has reduced vehicle emissions while improving service reliability for the evening rush.

In the fall of 2017, CTA will complete three years of operating two all-electric prototype buses made by New Flyer. These e-buses have zero tailpipe emissions and a range of up to 100 miles on a single battery charge. In service daily on a variety of bus routes, they continue to perform well in Chicago's tough environment of extreme heat and cold with heavy passenger loads.

Following the successful deployment of its first two e-buses, CTA is now preparing to purchase 20 to 30 new all-electric buses. CTA has secured over $40 million in federal grant funding toward the purchase of these e-buses plus the charging stations and infrastructure necessary to power them. While CTA's two existing e-buses charge in the garage during off-peak hours, CTA is planning to use en-route charging technology for this next purchase of e-buses. CTA is meeting with Alderman and community leaders in areas where the new charging stations are planned, and also working closely with ComEd to ensure that electrical service will be sufficient to enable fast-charging the electric buses.

Efficient Facilities

The CTA has made significant progress in identifying, evaluating, and implementing projects that increase energy efficiency in its facilities. Over the past two years, CTA has upgraded to more energy-efficient lighting over 50 "L" stations, including platforms, interior areas, and parking lots at stations on each of CTA's eight rail lines. Lighting upgrades improve safety and customer experience, in addition to saving energy and lowering CTA's electric bills.

CTA's own in-house electricians replaced older, inefficient light fixtures with new, high-efficiency fluorescent and LED fixtures in a variety of locations across numerous facilities. This includes service pits at rail maintenance shops, outdoors at rail yards, in the high bays at bus garages, and throughout subway tunnels. Across three of CTA's bus garages, electricians installed over 220 programmable thermostats to enable automated temperature controls that are estimated to reduce natural gas bills by over $50,000 per year. In total since 2014, CTA has made energy efficiency upgrades to over 85 facilities, reducing energy costs by an estimated $800,000 each year and earning $1.5 million in energy efficiency rebates.

CTA is also working to implement systems and processes that will support the ongoing management, maintenance, and operation of efficient facilities. CTA received LEED Gold certification for the 567 West Lake Street headquarters building. The certification was awarded in August 2017 by the U.S. Green Building Council under its new LEED Performance Score program (formerly known as Dynamic Plaque). The certification is based on the building's sustainable features, as well as ongoing resource-efficient operations, maintenance practices, and use by building occupants.

During Q1 and Q2 2017, CTA received 12 building energy assessment reports provided for free through the *Illinois Energy Now* program. The reports identify and analyze cost-effective energy efficiency projects throughout three bus garages, six rail shops, two maintenance shops, and CTA's Control Center. These reports provide CTA with in-depth analysis of the facilities' energy performance and potential energy savings measures, including estimates for the capital costs and payback periods for implementation. Reports have been valuable in identifying quick-payback projects and guiding prioritization of longer-term projects.

CTA's Skokie Rail Shop property was selected as one of 15 sites to be used as a case study for the Cook County Community Solar Project, a program funded by the U.S. Department of Energy. Cook County presented the findings from the project in September 2017. At Skokie, Cook County analyzed the design options of both rooftop solar and ground-mounted solar canopies over parking areas, together allowing the installation of a nearly two megawatt solar photovoltaic array. Community solar case study projections are dependent on the final outcome of the Illinois Power Agency's long-term planning process for renewable resources procurement, underway now through Q2 2018.

CTA is working with the Village of Oak Park, its community members, and engineering and design consultants to create a conceptual design of a leading-edge, sustainable rail station at the Blue Line Oak Park station. This project is an offshoot of the broader Blue Line Forest Park Branch Vision Study led by CTA's Strategic Planning Department. The Oak Park sustainable station study is considering design features including energy efficiency, renewable energy, water efficiency, green stormwater infrastructure, and more. Through a process that involves close collaboration with the community and local transit riders, CTA and Oak Park hope to create a model for sustainable station design that could be applied throughout CTA's rail system.

Climate Change Impact on the CTA

The CTA is engaged in ongoing efforts to increase the resilience of its infrastructure, operations, and ridership to observed and projected impacts of climate change. In an effort to mitigate the impact of climate change, the CTA partners with multiple local, regional and national agencies, including the Sustainable Chicago 2015 action task force and the City of Chicago's participation in the Rockefeller Foundation's 100 Resilient Cities (100RC) Program.

CTA and RTA are collaborating on a project to enhance the resiliency of CTA's bus service in the event of flooding, which is anticipated to become more frequent due to climate change. Similar to CTA's wayside energy storage study, the Bus Flooding Resilience study is funded by IDOT Regional Green Transit Grant to RTA. RTA and CTA provided extensive data to the project consultant to develop strategies to help CTA maintain efficient bus service in the event of street flooding. By early 2018, the consultant will deliver tools to RTA and CTA to strengthen bus flooding resiliency, such as re-route maps, communication plans for operators and customers, and estimates of cost impacts.

CTA's Red Purple Modernization project and Your New Blue projects are both major investments in the resiliency and efficiency of CTA's rail system for years to come. While riders will experience such benefits as more frequent service, less crowded trains, and smoother rides, the projects also help make CTA's critical infrastructure more robust in terms of electric power reliability, protection from water infiltration, and modernization of signal controls.

CTA Fare Structure

CTA has proposed the following fare structure for the 2018 Budget.

[Table: Fare Structure by Fare Group]

Fare Group	Current Fare Structure (Effective 14 January 2013)	Proposed Fare Structure (Effective 7 January 2018)
CTA Regular Fare Types		
Full Fare Bus [1]	$2.00	$2.25
Full Fare Rail [1]	$2.25	$2.50
Full Fare Cash (Bus Only)/PAYG [2]	$2.25	$2.50
Transfer [3]	$0.25 (1st), free (2nd)	Unchanged
Ventra Single Ride Ticket[4]	$3.00	Unchanged
1-Day/24-Hour Pass	$10.00	Unchanged
3-Day/72-Hour Pass	$20.00	Unchanged
7-Day Pass	$28.00	Unchanged
7-Day Pass (CTA/Pace)	$33.00	Unchanged
30-Day Pass (CTA/Pace)	$100.00	$105.00
Metra Link-Up	$55.00	Unchanged
CTA Reduced Fare Types [5]		
Reduced Fare Bus	$1.00	$1.10
Reduced Fare Rail	$1.10	$1.25
Reduced Fare Cash (Bus Only)	$1.10	$1.25
Transfer [3]	$0.15 (1st), free (2nd)	Unchanged
30-Day Reduced Pass	$50	Unchanged
CTA Student Fare [6]		
Bus & Rail on Student Card	$0.75	Unchanged
Transfer [3]	$0.15 (1st), free (2nd)	Unchanged
Student Fare Cash (Bus Only)	$0.75	Unchanged
O'Hare Station Fare [7]		
Full Fare on Ventra cards, Ventra Tickets, Cash or PAYG	$5.00	Unchanged
Stadium Express Bus		
#128 Soldier Field Express [8]	$5.00 round-trip $2.50 reduced fare	Unchanged

Notes

[1] Indicates fares paid with Ventra Card or registered contactless credit/debit cards, unless otherwise indicated.

[2] "PAYG" refers to payments made by a contactless credit card or mobile wallet not associated with a Transit Account (unregistered).

[3] Transfers are not available with cash or PAYG transactions.

[4] Single Ride Ticket Fare includes transfer for bus and rail.

[5] The CTA offers reduced fares via a RTA reduced-fare permit to seniors and persons with disabilities in compliance with 49 CFR Part 609. In addition, the CTA also offers reduced fares to children age 7-11. Free rides are offered to low-income seniors and persons with disabilities as required by 70 ILCS 3605/51(b) & 70 ILCS 3605/52. Children under the age of 7 are free at all times when riding with an adult.

[6] Student Fares are for enrolled elementary and high school students on school days only, 5:30 a.m. to 8:30 p.m. Students can pay with transit value on their Student Ventra Card, or present the Card on bus to be eligible for reduced cash fare.

[7] Special $5 pricing at O'Hare station is not applicable to the following customers: Ventra Cards using a purchased period-pass; contactless credit/debit cards using a purchased period-pass; O'Hare Airport-based employees using an employer-issued Ventra Card; reduced fares; student fares; and U-Pass.

[8] The #128 Soldier Field Express is a service jointly managed by CTA and Metra, scheduled to operate for all Chicago Bears home games at Soldier Field, and other agreed-upon events. Period-passes, Student Fares and U-Pass fares are not accepted on the #128. Reduced fares are for customers displaying the RTA reduced-fare permit and children ages 7 to 11. Statutory free rides (seniors and persons with disabilities) and children under the age of 7 are free on the #128.

Comparative Fare Structure

Each transit agency has its own card-based system and fares. Comparable fares are reflected here, as of October, 2017.

[Table: Comparative Fare Structure]

CITY SYSTEM	Bus Fare	Express Bus Fare	Rail Fare	30-Day/Monthly Pass Cost	Reduced Fare (Senior/Disabled)
CHICAGO CTA (proposed)	$2.25	---	$2.50	$105.00	$1.10 - Bus / $1.25 - Rail
ATLANTA (MARTA)	$2.50	---	$2.50	$95.00	1.00
NEW YORK CITY (MTA)	$2.75	$6.50	$2.75	$121.00	1.35
PHILADELPHIA (SEPTA)	$2.00 [1]	---	$2.00 [1]	$96.00	Senior: Free / Disabled: $1.25
BOSTON (MBTA)	$1.70	$4 (Inner) / $5.25 (Outer)	$2.25	$84.50	$0.85 – Bus / $1.10 – Rail
WASHINGTON D.C. (WMATA)	$2.00	$4.25 Regular / $2.00 Senior & Disabled	$2.00 - $6.00 [2]	$135 [3]	1.00
LOS ANGELES (LACMTA)	$1.75	$2.50 Regular / $1.35 Senior & Disabled	$1.75	$100.00	$0.75 Rush Hours / $0.35 Non-Rush Hours

[Table: Historical fare Structure 1991 – Present]

Year	Bus Fare	Rail Fare	Transfer	7-Day Pass	30-Day Pass	Reduced Fare
1991-1998	$1.50	$1.50	$0.30	$20	$60-$88	$0.75
1999-2003	$1.50	$1.50	$0.30	$20	$75	$0.75
2004 - 2005	$1.75	$1.75	$0.25	$20	$75	$0.85
2006 - 2008	$1.75	$2.00	$0.25	$20	$75	$0.85
2009 - 2012	$2.00	$2.25	$0.25	$23	$86	$0.85
2013 - 2017	$2.00	$2.25	$0.25	$28	$100	$1.00 – Bus / $1.10 - Rail
2018 (Proposed)	$2.25	$2.50	$0.25		$105	$1.10 – Bus / $1.25 - Rail

NOTES

1 Zone charge may apply. Transfer charge $1.

2 The fares are zone based and depend on hours traveled. Full fares are paid during peak hours varying from $2.25 to $6.00 (weekday opening-9:00 a.m. and 3:00-7:00 p.m., based on the starting time of the trip).

3 WMATA offers select calendar month passes to registered customer for different rates. A $135 pass covers system-wide access for commuters who would generally pay $2.25 per ride.

Acronyms

ADA	Americans with Disabilities Act
APB	Accounting Principles Board
BAB	Build America Bonds
BRT	Bus Rapid Transit
CAC	Capital Advisory Committee
CBO	Congressional Budget Office
CIG	Capital Investment Grant
CIP	Capital Improvement Program
CDOT	Chicago Department of Transportation
CMAP	Chicago Metropolitan Agency for Planning
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CPD	Chicago Police Department
CPI	Consumer Price Index
CTA	Chicago Transit Authority
DBE	Disadvantaged Business Enterprise
DHS	Department of Homeland Security
EIA	Energy Information Administration
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FASB	Financial Accounting Standards Board
FAST	Fixing America's Surface Transportation (FAST) Act
FEJA	Future Energy Jobs Act
FFGA	Full Funding Grant Agreement
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FOMC	Federal Open Market Committee
FTA	Federal Transit Administration
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GARVEE	Grant Anticipation Revenue Vehicles
GASB	Governmental Accounting Standards Board
GDP	Gross Domestic Product
GTT	City of Chicago Ground Transportation Tax
HTF	Highway Trust Funds
ICE	Innovation, Coordination and Enhancement Fund of RTA
IDOT	Illinois Department of Transportation
IT	Information Technology
JARC	Job Access and Reverse Commute Program
LACMTA	Los Angeles County Metropolitan Transportation Authority
LPA	Locally Preferred Alternative
MAP-21	Moving Ahead for Progress in the 21st Century
MBTA	Massachusetts Bay Transportation Authority
MTA	Mass Transit Accounts
NEPA	National Environmental Policy Act
NTD	National Transit Database
NYCT	New York City Transit

PBC	Public Building Commission of Chicago
PBV	Positive Budget Variance
PE	Preliminary Engineering
PMP	Project Master Plans
POB	Pension Obligation Bond
PPI	Producer Price Index
PTF	Public Transportation Fund
RHCT	Retiree Health Care Trust
RLE	Red Line Extension
RPM	Red and Purple Modernization Project
RTA	Regional Transportation Authority
RETT	Real Estate Transfer Tax
SCADA	Supervisory Control and Data Acquisition
SCIP	Strategic Capital Improvement Program
SEPTA	Southeastern Pennsylvania Transportation Authority
SFY	State Fiscal Year
SMS	Safety Management System
SOGR	State of Good Repair
STIP	State Transportation Improvement Program
STO	Scheduled Transit Operations
SWAP	Sheriff's Work Alternative Program
TIF	Tax Increment Financing
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIGER	Transportation Investment Generating Economic Recovery
TIGGER	Transit Investments for Greenhouse Gas and Energy Reduction
TIP	Transportation Improvement Program
TSGP	Transit Security Grant Program
TSP	Traffic Signal Prioritization
UPRR	Union Pacific Railroad
UPS	Uninterrupted Power Supply
USDOT	United States Department of Transportation
UWP	Unified Work Program
UZA	Urbanized Area
WMATA	Washington Metropolitan Area Transit Authority
YNB	Your New Blue

Glossary

2008 Legislation
The amendments to the RTA Act in 2008 included the following policies affecting the CTA budget: 1) Increased the RTA sales tax to 1.25 percent in Cook County and 0.75 percent in the collar counties; 2) Prescribed a new distribution of revenues for the incremental sales tax increase and Public Transportation Fund match; 3) Established an Innovation, Coordination, and Enhancement (ICE) Fund, an ADA Paratransit Fund, and a Suburban Community Mobility Fund; and 4) The chair of the CTA no longer was on the RTA Board.

Accessible
As defined by the FTA, a site, building, facility, or portion thereof that complies with defined standards and that can be approached, entered, and used by persons with disabilities.

Accounting Principles Board (APB)
The former authoritative body of the American Institute of Certified Public Accountants (AICPA). It was created by the AICPA in 1959 and issued pronouncements on accounting principles until 1973, when it was replaced by the Financial Accounting Standards Board (FASB).

Accrual Basis
A method of accounting in which revenues are reported in the fiscal period when they are earned, regardless of when they are received, and expenses are deducted in the fiscal period they are incurred, whether they are paid or not.

Alternatives Analysis (AA) Study
To conduct the Study is the first step of the FTA's process to qualify for New Starts funding. The Study is designed to examine all the potential transit options available and to determine a locally preferred alternative. Among the projects that were authorized for further analysis by the United States Congress, the CTA has completed the Studies for the Red Line Extension south of 95th, the Orange Line Extension to Ford City, and the Yellow Line Extension north of Dempster Avenue in Skokie.

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) of 1990, including changes made by the ADA Amendments Act of 2008, became effective on January 1, 2009. This federal act requires many changes to ensure that people with disabilities have access to jobs, public accommodations, telecommunications, and public services, including public transit. Examples of these changes includes mandating that all new buses and rail lines be wheelchair accessible and that alternative transportation be provided to customers unable to access the transit system.

Americans with Disabilities Act (ADA) Paratransit Fund
A fund created by the 2008 Legislation to fund regional paratransit services provided by Pace.

American Public Transportation Association (APTA)
International organization for the bus, rapid transit, and commuter rail systems industry. To strengthen and improve public transportation, APTA serves and leads its diverse membership through advocacy, innovation, and information sharing. APTA and its members and staff work to ensure that public transportation is available and accessible for all Americans in communities across the country.

Articulated Bus
A high-capacity passenger bus that flexes in the middle.

Automated Voice Annunciation System
The Automatic Voice Annunciation (AVA) system is an on-board passenger announcement program which coordinate with both global positioning (satellite-based) and logical positioning (distance-based) systems to determine the location of a bus and make the appropriate next-stop announcement.

Big Gap
An instance when the time in between buses is more than double the scheduled interval and also creates a gap of more than 15 minutes.

Bond
An interest-bearing promise to pay a specified sum of money on a specified date in the future.

Build America Bonds (BAB)
A subsidy provided by the American Recovery and Reinvestment Act that provides for a wider pool of capital financing funding for state, county, and municipal entities, such as the CTA.

Bureau of Labor Statistics (BLS)
The Bureau of Labor Statistics of the U.S. Department of Labor is the principal federal agency responsible for measuring labor market activity, working conditions, and price changes in the economy. Its mission is to collect, analyze, and disseminate essential economic information to support public and private decision-making. As an independent statistical agency, BLS serves its diverse user communities by providing products and services that are objective, timely, accurate, and relevant.

Bus Rapid Transit (BRT)
BRT is an enhanced bus system that operates on bus lanes or other transitways in order to combine the flexibility of buses with the efficiency of rail. By doing so, BRT operates at faster speeds and provides greater service reliability and customer convenience.

Capital Advisory Committee (CAC)
The Capital Advisory Committee is comprised of members from local universities as well as leaders from the business community. The purpose of the CAC is to solicit expert advice from external professionals in carrying out the CTA's capital process, including the selection of projects for funding and advising the CTA in closing the funding gap.

Capital Budget
A formal plan of action for a specified time period for purchases of fixed assets using capital grants.

Capital Expense
Expenditures that acquire, improve, or extend the useful life of any item with an expected life of three or more years and a value of more than $5,000 (e.g. rolling stock, track and structure, support facilities and equipment, and stations and passenger equipment). It can also include the costs associated with the long-term maintenance of these assets, such as bus overhaul programs, rail overhaul programs, and preventive maintenance. Also referred to as a capital improvement.

Capital Investment Grant
Funds received from grantor funding agencies used to finance construction, renovation, and major repairs or the purchase of machinery, equipment, buildings, or land.

Capital Improvement Program (CIP)
A strategic and comprehensive financing program in which available capital funds are identified and targeted toward key capital renewal and improvement needs of the CTA system to yield the greatest customer benefit.

Chicago Department of Transportation (CDOT)
The Chicago Department of Transportation (CDOT) is responsible for public way infrastructure, including planning, design, construction, maintenance, and management.

Collar Counties
The five counties that surround Cook County as identified in the RTA Act: Will, Kane, DuPage, Lake, and McHenry counties.

Chicago Metropolitan Agency for Planning (CMAP)
The agency that integrates land use planning and transportation planning for the counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will in northeastern Illinois. CMAP and its partners aim to remove barriers to cooperation across geographical boundaries and subject areas such as land use, transportation, natural resources, housing, and economic development.

Congestion Mitigation & Air Quality Improvement Program (CMAQ)
A program created by the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 that provides funding for transportation projects that improve air quality and reduce traffic congestion.

Congressional Budget Office
Branch of the federal government that provides economic data to Congress.

Consumer Price Index (CPI)
A measure estimating the average price of consumer goods and services purchased by households. CPI measures a price change for a market basket of goods and services from one period to the next within the same area and is used as a measure of the increase in the cost of living (i.e. economic inflation).

Corridor
A defined study area considered for significant transportation projects such as highway improvements, bus transitways, rail lines, or bikeways (e.g. Dan Ryan corridor, Western Avenue corridor).

CTA Board Member Terms of Office
Board member terms are in seven year increments. Board members may be appointed to terms already in progress, in which case they may serve until the end of that term.

Department of Homeland Security (DHS)
This agency that is responsible for ensuring the safety and security of the United States from terrorist attacks and other disasters.

Depreciation
An accounting term that recognizes the loss in value of a tangible fixed asset over time attributable to deterioration, obsolescence, and impending retirement. Applies particularly to physical assets like vehicles, equipment, and structures.

Disadvantaged Business Enterprise (DBE)
The Disadvantaged Business Enterprise (DBE) program is intended to ensure nondiscrimination in the award and administration of contracts.

Discretionary Funds
Funds that the RTA allocates, at its discretion, to the Service Boards. These funds include Public Transportation Funds and a portion of the 15 percent of the RTA Sales Tax.

Employees' Retirement Plan
A single-employer, defined benefit pension plan covering substantially all full-time permanent union and nonunion employees.

Energy Information Administration (EIA)
The U.S. Energy Information Administration (EIA) collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

Environmental Impact Statement (EIS)
An Environmental Impact Statement (EIS) is a document required by the National Environmental Policy Act for federal government agency actions significantly affecting the quality of the human environment. As a tool for decision making, an EIS describes the positive and negative environmental effects of proposed agency action and cites alternative actions.

Environmental Protection Agency (EPA)
The United States Environmental Protection Agency (EPA or sometimes USEPA) is an agency of the Federal government of the United States which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.

Fare
The amount charged to passengers for bus and rail services.

Farebox
Equipment used for the collection of bus fares.

Farecard
Electronic fare media used for payment of fares.

Federal Fiscal Year (FFY)
The Federal Fiscal Year (FFY) is the accounting period for the federal government which begins October 1 and ends September 30.

Federal Funds Rate
The interest rate at which banks lend balances at the Federal Reserve to other banks overnight. The rate is set by the Federal Open Market Committee (FOMC). The FOMC's long term goals are price stability and sustainable economic growth in the economy.

Federal Highway Administration (FHWA)
The Federal Highway Administration (FHWA) is an agency within the U.S. Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system.

Federal Open Market Committee (FOMC)
Branch of the Federal Reserve that is responsible for open market operations, such as the purchase and sale of U.S. treasuries and federal agencies securities.

Federal Transit Administration (FTA)
The federal agency which provides financial and planning assistance to help plan, build, and operate rail, bus, and paratransit systems through grant programs.

Federal Insurance Contributions Act (FICA)
Social Security payroll taxes are collected under the authority of FICA.

Financial Accounting Standards Board (FASB)
The FASB establishes and improves standards of financial accounting and reporting for the guidance and education of the public, including issuers, auditors, and users of financial information.

Financial Plan
In addition to an annual budget, the Regional Transportation Authority Act, as amended in 2008, requires that all transit agencies prepare a financial plan encompassing the two years subsequent to the budget year. This provides a three-year projection of expenses, revenues, and public funding requirements.

Fiscal Year (FY)
A fiscal year is a 12-month period used for calculating annual financial reports in organizations. The CTA's fiscal year runs congruent to the calendar year, beginning on January 1 and ending on December 31.

Fixing America's Surface Transportation (FAST) Act
The Fixing America's Surface Transportation (FAST) Act was enacted in 2015 and authorizes $305 billion over fiscal years 2016 through 2020 for highways; highway and motor vehicle safety; public transportation; motor carrier safety; hazardous materials safety; rails; and research, technology, and statistics programs.

Full Funding Grant Agreement (FFGA)
Grant agreements authorized under federal transit law that establish the terms and conditions for federal financial participation in a New Starts project. The FFGA defines the project, sets the maximum amount of federal New Starts funding for a project, covers the period of time for completion of the project, and facilitates efficient management of the project in accordance with applicable federal statutes, regulations, and policy.

Fund Balance (See Unrestricted Net Assets)

Funding (Budget) Marks
The Regional Transportation Authority Act, as amended in 1983, calls for the RTA to advise each of its Service Boards by September 15th of the public funding to be available for the following year, as well as the required recovery ratio.

Future Energy Jobs Act (FEJA)
The Future Energy Jobs Act (FEJA) went into effect as Illinois law on June 1, 2017 and expands energy efficiency programs, job training in renewable energy and increases investment in solar and wind power in Illinois.

Generally Accepted Accounting Principles (GAAP)
GAAP is the standard framework of guidelines for financial accounting, mainly used in the United States. It includes the standards, conventions, and rules accountants follow in recording and summarizing transactions, and in the preparation of financial statements.

Governmental Accounting Standards Board (GASB)
The GASB establishes and improves standards of state and local governmental accounting and financial reporting.

Government Finance Office Association (GFOA)
The purpose of the Government Finance Officers Association is to enhance and promote the professional management of governments for the public benefit by identifying and developing financial policies and best practices, and promoting their use through education, training, facilitation of member networking, and leadership.

Grant Anticipation Revenue Vehicles (GARVEE)
Grant Anticipation Revenue Vehicles (GARVEEs) is a debt instrument issued when moneys are anticipated from future federal reimbursement of debt service and related financing cost under Section 122 of Title 23, United States Code.

Gross Domestic Product (GDP)
As a measure of economic activities, it is the amount of goods and services produced in the United States in one year. It is calculated by adding together the market values of all of the final goods and services produced in a year and reported by the U.S. Bureau of Economic Analysis.

Ground Transportation Tax (GTT)
The City of Chicago Ground Transportation Tax applies to businesses that provide ground transportation vehicles for hire in Chicago to passengers A $0.15 per-ride fee starting in 2018 with a $0.05 increase starting in 2019 on ride-hailing services or transportation network providers will be added as part of the Ground Transportation Tax (GTT) to fund CTA capital improvements. (See Ride-hailing fee)

Headway
The time span between when one service vehicle (bus or rail) leaves a stop/station and when the following vehicle arrives at the same stop/station on specified routes. Also called service frequency.

Heavy Rail
An electric railway with the capacity for a heavy volume of traffic. Heavy rail is characterized by high-speed passenger rail cars and trains operating on fixed rails in separate rights-of-way from which all other vehicular and foot traffic is excluded.

Hedge
A type of investment activity used to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security to minimize unwanted risks associated with price fluctuation.

Highway Trust Funds (HTF)
A transportation fund in the United States which receives money from a federal fuel tax of 18.4 cents per gallon on gasoline and 24.4 cents per gallon of diesel fuel and related excise taxes.

Hybrid Bus
A hybrid bus combines a conventional internal combustion engine propulsion system with an electric propulsion system and uses a diesel-electric powertrain. Also known as a hybrid diesel-electric bus.

Illinois Jobs Now Program
A $31 billion program creating over 439,000 jobs in five years from 2010 through 2014; designed to improve bridges and roads, transportation networks, schools, and communities.

Illinois' Low-Income Circuit Breaker Program
The official name of the Program is the Senior Citizens and Disabled Persons Property Tax Relief and Pharmaceutical Assistance Act, governed by the Illinois Department on Aging. The Program is to help offset the cost of property taxes and other living costs by providing low-income, senior, or disabled residents with yearly grants.

Infrastructure
Capital assets that make up the CTA's transportation system, including maintenance facilities, rail track, signals, stations, elevated structures, and power substations.

Innovation, Coordination and Enhancement Fund (ICE)
A fund established by the 2008 amendments to the RTA Act for operating or capital grants or loans to Service Boards, transportation agencies, or units of local government that advance the goals and objectives identified by the RTA's Strategic Plan. Unless an emergency is determined by the RTA Board that requires some or all amounts of the Fund, it can only be used to enhance the coordination and integration of public transportation and develop and implement innovations to improve the quality and delivery of public transportation.

Intermodal
Transportation by more than one mode (bus, train, etc.) during a single journey.

Interval
The time between when one service vehicle (bus or train) leaves a stop/station to the time when the following vehicle leaves the same stop/station.

Job Access and Reverse Commute Program (JARC)
A program established by the FTA to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment, which often is located in a less accessible area and/or requires late at night or weekend schedules when conventional transit services are not sufficiently provided.

Job Order Contracting (JOC)
A collaborative construction project delivery method that enables organizations to get numerous, commonly encountered construction projects done quickly and easily through multi-year contracts. JOC reduces unnecessary levels of engineering, design, and contract procurement time and construction project procurement costs by awarding long-term contracts for a wide variety of renovation, repair, and construction projects.

Locally Preferred Alternative (LPA)
The final selected scope and design for a major corridor investment. Alternatives analysis is considered complete when a locally preferred alternative is selected by local and regional decision makers and adopted by the Metropolitan Planning Organization (MPO) into the financially constrained, long-range metropolitan transportation plan.

London Interbank Offered Rate (LIBOR)
Short-term interest rate used when banks borrow funds from other banks in the London interbank market. The world's most widely used benchmark for short-term loans.

Major Delay – Rail
An instance where a train experiences a delay to service of ten minutes or more.

Mass Transit Accounts (MTA)
The Mass Transit Fund was created in 1982. The federal tax on motor fuels yielded $28.2 billion in 2006.

Mean Miles Between Defects
The average mileage a train accrues before experiencing a defect.

Metra
Commuter Rail division of the RTA responsible for the day-to-day operation of the region's long-distance commuter rail transit service (with the exception of those services provided by the CTA). Metra was created in 1983 by an amendment to the RTA Act.

Moving Ahead for Progress in the 21st Century (MAP-21)
A funding and authorization bill to govern United States federal surface transportation spending. It was passed by Congress on June 29, 2012, and President Barack Obama signed it on July 6.

National Environmental Policy Act (NEPA)
A United States environmental law that promotes the enhancement of the environment and established the President's Council on Environmental Quality (CEQ). The law was enacted on January 1, 1970.

National Transit Database (NTD)
The FTA's primary national database for statistics on the transit industry.

New Starts
FTA discretionary program that is the federal government's primary financial resource for supporting locally-planned, implemented, and operated transit "guideway" capital investments.

Non-Farm Payroll
A compiled employment level of goods-producing, construction, and manufacturing companies. It is released monthly by the United States Department of Labor to represent the number of jobs added or lost in the economy over the last month.

Non-Operating Funds
Capital grant monies to fund expenses.

Non-Revenue Vehicle
Vehicles that do not carry fare-paying passengers and are used to support transit operations.

Operating Budget
Annual revenues and expenses forecast to maintain operations.

Operating Expenses
Costs associated with the day-to-day operations of the delivery of service for a transit agency. Examples of operating expenses include labor, material, fuel, power, security, and professional services.

Operating Revenues
Revenues generated from user fees (in the form of farebox revenues) or other activities directly related to operations, such as advertising, concessions, parking, investment income, etc.

Organization of Petroleum Exporting Countries (OPEC)
OPEC is an intergovernmental organization of 12 developing countries made up of Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. OPEC has maintained its headquarters in Vienna since 1965.

Pace
The Suburban Bus Division of the RTA, responsible for non-rail, suburban public transit service and all paratransit service. Pace was created in 1983 by an amendment to the RTA Act.

Paratransit Service
Demand-response service utilizing wheelchair-accessible vans and small buses to provide pre-arranged trips to and from specific locations within the service area to certified participants. Paratransit includes demand-response transportation services, subscription bus services, and shared-ride taxis.

Passenger Miles
The sum of the distances traveled by passengers.

Pay-As-You-Go Funding
A practice of financing expenditures with funds that is currently available rather than borrowed.

Pension Obligation Bonds (POB)
Debt instruments issued by a governmental entity to fund all or a portion of the Unfunded Actuarially Accrued Liabilities (UAAL) for pension and/or Other Post-Employment Benefits (OPEB).

Performance Management
The process of assessing and acting upon progress toward achieving predetermined measures and metrics. All operating and most support personnel are held accountable to these measures and metrics. The CTA implemented a performance management program in May 2007.

Positive Budget Variance (PBV)
The amount by which a service board comes in favorable to available funding from the RTA in a given budget year. RTA policy allows the service boards to retain these funds in an unrestricted fund balance which can be used for capital projects or one time operating expenses.

Power Washing - Facilities
The deep cleaning of a CTA station or facility using pressure washing equipment.

Preliminary Engineering (PE)
An analysis and design work to produce construction plans, specifications and cost estimates. PE brings plans to 30 percent complete. The next step, Final Design, brings plans to 100 percent completion.

Preventive Maintenance
The care and servicing of equipment and facilities in order to maintain them in satisfactory operating condition. Preventive maintenance provides for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects.

Producer Price Index (PPI)
A family of indices from the U.S. Bureau of Labor Statistics (BLS) that measures the average changes over time in the prices received by domestic producers of goods and services.

Proprietary Fund
One of three broad classifications of funds used by state and local governments. Proprietary funds include enterprise funds and internal service funds. Enterprise funds are used for services provided to the public on a user charge basis.

Public Building Commission (PBC)
Formed in 1956, this City of Chicago organization provides professional management of the city's public construction projects.

Public Funding
Funding received from the RTA or other government agencies.

Public Transportation Funds (PTF)
As authorized by the RTA Act, the Illinois State Treasurer transfers from the State General Revenue Fund an amount equal to 25 percent of RTA sales tax collections to a special fund, called the Public Transportation Fund (PTF), and then remits it to the RTA on a monthly basis. The state funding package increases the percentage of state sales tax dedicated to mass transit and deposits additional amount of funding to PTF. All funds deposited are allocated to the RTA to be used at its discretion for the benefit of the Service Boards.

Real Estate Transfer Tax (RETT)
A source of public funding for the CTA collected by the City of Chicago. The 2008 legislation authorized a $1.50 per $500 increase in RETT, and the CTA receives 100 percent of the RETT increase.

Real Time Bus Management (RTBM)
The RTBM System polls the IVN on each bus every thirty seconds for location updates. The buses also send up events when new operators logon, start a new trip, or pass a time point. A complex system in a database keeps track of logons and routes and archives the data in real-time.

Recovery Ratio
Measures the percentage of expenses that a Service Board must pay against revenues that it generates. The RTA Act mandates that the RTA region must attain an annual recovery ratio of at least 50 percent.

Reduced Fare
Discounted fare for children ages 7 through 11, grade school and high school students (with CTA ID), seniors 65 and older (with RTA ID), and riders with disabilities (with RTA ID) except paratransit riders.

Reduced Fare Reimbursement
Reimbursement of revenue lost by the Service Boards due to providing reduced fares to students, elderly and the disabled. The CTA recovers a portion of the cost of trips with both the fare revenue and operating subsidies. The reimbursements are made from the State of Illinois to cover a portion of the difference between the standard and reduced fare. Reimbursement amounts are allocated to the Service Boards based on reduced fare passenger trips taken during the year.

Regional Transportation Authority (RTA)
The RTA is the financial oversight and regional planning body for the three public transit operators in northeastern Illinois: the CTA, Metra commuter rail, and Pace suburban bus.

Regional Transportation Authority Act (RTA Act)
An Act that regulates which public funds may be expended and authorizes the state to provide financial assistance to units of local government for distribution to providers of public transportation, including the CTA. It authorizes the distribution of sales tax revenue collected by the City of Chicago and collar counties, Public Transportation Funds, State Assistance, as well as other funding streams for the CTA. It also outlines criteria that the CTA has to meet for its budget approval.

Retiree Health Care Trust (RHCT)
Provides and administers health care benefits for CTA retirees and their dependents and survivors. The trust is a legal entity separate and distinct from the CTA. It is not a fiduciary fund or a component unit of the CTA.

RTA Sales Tax
The primary source of operating revenue for the RTA, the CTA, Metra, and Pace. The RTA retains 15 percent of the original one percent RTA sales tax authorized in 1983. Of that which remains, the CTA receives 100 percent of the taxes collected in the City of Chicago and 30 percent of those taxes collected in suburban Cook County. Of the funding available from the 0.25 percent sales tax and PTF authorized by the 2008 legislation, the CTA receives 48 percent of the remaining balance after allocations are made to fund various programs.

Revenue Bond
A certificate of debt issued by an organization in order to raise revenue. It guarantees payment of the original investment plus interest by a specified date. Debt service payment is secured by a specific revenue source.

Revenue Equipment
Includes vehicles that carry fare-paying passengers and equipment used for the collection of fares.

Ride
A trip taken by passengers on the bus or rail system.

Ride-hailing Fee
A $0.15 per-ride fee starting in 2018 with a $0.05 increase starting in 2019 on ride-hailing services like Uber and Lyft to be collected by the City of Chicago as part of the Ground Transportation Tax (GTT) to fund CTA improvements.

Ridership (Unlinked Passenger Trips)
Total number of rides. Each passenger is counted each time that person boards a vehicle.

Right-of-Way
A strip of land that is granted, through an easement or other mechanism, for transportation purposes, such as for a trail, driveway, rail line, or highway. A right-of-way is reserved for the purposes of maintenance or expansion of existing services within the right-of-way.

Rolling Stock
Public transportation vehicles, including rail cars and buses.

Run
Rail or bus operator's assigned period(s) of work on a given day.

Safety Management System (SMS)
A comprehensive, collaborative approach that brings management and labor together to build on the transit industry's existing safety foundation to control risk better, detect and correct safety problems earlier, share and analyze safety data more effectively, and measure safety performance more carefully.

Scheduled Transit Operations (STO)
The scheduled transit operations classification includes bus operators, motormen, and conductors.

Service Boards
CTA, Metra commuter rail, and Pace suburban bus system, as referred to by the Regional Transportation Authority Act.

Sheriff's Work Alternative Program (SWAP)
A program where persons convicted of Driving Under the Influence and other low-level offenses are required to provide a variety of community services for municipalities throughout Cook County.

Slow Zone
Sections of track where trains must reduce speed in order to safely operate rail service.

State Assistance
The supplemental funding provided by the RTA Act in the form of additional state and financial assistance to the RTA in connection with its issuance of Strategic Capital Improvement Program (SCIP) bonds. It equals the debt service amounts paid to the bondholders of the SCI bonds plus any debt service savings from the issuance of refunding or advanced refunding SCIP bonds, less the amount of interest earned on the bonds' proceeds.

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State Fiscal Year (SFY)
The State of Illinois' Fiscal year begins July 1 and ends June 30.

State of Illinois' Public Transportation Fund (PTF)
As authorized by the RTA Act, the Illinois State Treasurer transfers from the State General Revenue Fund an amount equal to 25 percent of RTA sales tax collections (or gasoline or parking taxes, if imposed by the RTA). The treasurer transfers this amount to a special fund, called the Public Transportation Fund (PTF), and then remits it to the RTA on a monthly basis. The RTA uses these funds at its discretion to fund the service board needs, RTA operations, debt service, and capital investment.

Stimulus Funds
See American Recovery and Reinvestment Act.

Suburban Community Mobility Fund
Outlined by the RTA Act, grants and appropriations from the state, which the RTA distributes to the Suburban Bus Board for operating transit services, other than traditional fixed-route services, that enhance suburban mobility, including, but not limited to, demand-responsive transit services, ride sharing, van pooling, service coordination, centralized dispatching and call taking, reverse commuting, service restructuring, and bus rapid transit.

Supervisory Control and Data Acquisition (SCADA)
A control system that collects and operational data and is used to control and manage rail service.

System-Generated Revenue
Revenue generated by the CTA. Includes fare revenue, advertising, investment income, income from local governments by provision of the Regional Transportation Authority Act, and subsidies for reduced fare riders per 1989 legislation.

Tax Increment Financing (TIF)
Tax Increment Financing (TIF) is a special funding tool used by the City of Chicago to promote public and private investment across the city.

Transit Security Grant Program (TSGP)
The Transit Security Grant Program is administrated by FEMA to support transportation infrastructure security activities.

Transportation Infrastructure Finance and Innovation Act (TIFIA)
The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides credit assistance for qualified projects of regional and national significance. Many large-scale surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital.

Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER)
The TIGGER Program has been continued in FY2011 through the Department of Defense and Full-Year Continuing Appropriations Act 2011 (Pub. L. 112-10). $49.9 million was appropriated for grants to public transit agencies for capital investments that will reduce the energy consumption or greenhouse gas emissions of their public transportation systems.

Transit Investment Generating Economic Recovery (TIGER)
TIGER is a supplementary discretionary grant program included in the American Recovery and Reinvestment Act of 2009 that invests in road, rail, transit and port projects that promise to achieve critical national objectives.

Transportation Improvement Plan (TIP)
A six-year financial program that describes the schedule for obligating federal funds to state and local projects. The TIP contains funding information for all modes of transportation, including highways and high-occupancy vehicles, as well as transit capital and operating costs.

Top Operator Rate
The top hourly rate paid to CTA bus and rail operators, based on employee seniority within the job, as specified by the union contract.

Trip
A one-way bus or train trip from origin to destination terminal.

Traffic Signal Prioritization (TSP)
Operational strategy where communication between a transit bus and a traffic signal alters the timing of the traffic signal to give priority to the transit vehicle.

Unified Work Program (UWP)
The Unified Work Program lists the planning projects the Chicago Area Transportation Study and other agencies undertake each year to enhance transportation in northeastern Illinois and to fulfill federal planning regulations.

Unlinked Passenger Trip
An unlinked passenger trip is a single boarding of any transit vehicle. Thus, unlinked passenger trips for any transit system are the number of passengers boarding public transportation vehicles. A passenger is counted each time he boards a vehicle, even if the boarding is part of the same trip.

Unrestricted Net Assets
The portion of net assets that is neither restricted nor invested in capital assets net of related debt. These funds are considered by CTA to represent the available fund balance.

Vehicle Revenue Hours
The hours that vehicles travel while in revenue service. Vehicle revenue hours include recovery time but exclude travel to and from storage facilities.

Vehicle Revenue Miles
Miles that vehicles travel while in revenue service. Vehicle revenue miles exclude travel to and from storage facilities.

Ventra
Payment system for CTA and Pace that allows customers to pay for train and bus rides with the same methods used for everyday purchases and also allows them to manage their accounts online and choose from several different contactless payment methods.