SOLUTION WINTER 2018

A CATERPILLAR PUBLICATION SERVING GOVERNMENTAL AGENCIES

ON **DEMAND**

The Cat Rental Store helps your agency work more efficiently

TRACKS VS. WHEELS

Selecting the best compact loader for your agency

It Takes A PARS H

DEALER SERVICES, EXPERIENCED EMPLOYEES HELP MEET CHALLENGE OF HEAVILY TRAVELED ROADWAY SYSTEM

JOBSITE WORKHORSES FIVE-SEAT UTILITY VEHICLES EXPAND CAT® UTV FAMILY

CATERPILLAR®

GET A STEERING WHEEL AND LEVERS ON NEW

140 MOTOR GRADER

NEW 140 COMBINES PROVEN PERFORMANCE WITH TECHNOLOGY

The all-new Cat[®] 140 Motor Grader unites performance and technology options with a steering wheel and lever controls. Ergonomically adjustable seat offers more comfort and adjustments. New filtration technology saves up to 20 percent in fluid and filter costs, while longer maintenance intervals slash service time. With Cat GRADE technology options, you will use up to 40 percent less material with fewer passes, while improving overall grade consistency.

Increased Performance

Cat C9.3 engine delivers smooth grading with reliable performance and efficiency. Adjustable control console enables easy, precise control. Optimized machine balance and all-wheel drive option deliver added traction control. Cat GRADE technology helps keep productivity high and reduces material costs. Operate in standard ECO mode to save up to 10 percent in fuel consumption.

Productivity with Cab Comfort

New cab with adjustable seat options ensures comfort and productivity. Easy-to-read information display integrates Cat Connect Technology with machine information. Add to improved visibility with optional rear vision camera for excellent visibility to rear of machine and added safety. High-capacity, heating-and-cooling system keeps dust out and circulates fresh air.

Integrated Cat Technology

Technology options are available on the new 140 for all customers and price points-

- Cat GRADE Ready Option
- Cat GRADE with Cross Slope
- Cat GRADE with Cross Slope Indicate
- Digital Blade Slope Meter
- Stable Blade

Product Link[™] is standard, providing location, machine hours, fuel usage, productivity, and other machine data on demand through VisionLink[®] to help improve efficiency and lower operating costs. Save time and money by updating the machine's software with cellular service via Remote Services.

Simple Maintenance

Save up to 20 percent in fluid and filter costs with extended maintenance intervals. New filters eliminate need for the 500-hour filter change. Change filters at 1,000 hours to keep the machine productive. Filters are grouped together for easy access and preventive maintenance. Ground-level fuel fill keeps operators safer. Reversing fan option prevents material build up near rear door intake screen to help reduce cooling system maintenance.

For more information about the new 140 Motor Grader, please contact our dealership or visit www.cat.com. \circledast



MOTOR GRADER | 140

Net Power: (ISO 9249/SAE J1349 and EEC 80/1269): 250 hp

Operating Weight: Tandem*: 42.325 lb

All-Wheel Drive*: 44,613 lb

*Typically equipped operating weight is calculated with full fluids, operator, push block, guards, rear ripper/scarifier, tires, and other equipment.

Note: Comparisons are to the 140M3.



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CAT.COM/GOVERNMENTAL

Cat.com/governmental includes

specifications for all machines. Download them or contact our dealership. Check this out and more at **Cat.com/governmental.**



RELY ON THE CAT® RENTAL STORE

Meeting an increased demand for services, while staying within your budget, is a challenge facing many governmental agencies. Renting machines and work tools helps you meet this challenge. Six ways that The Cat Rental Store enables your agency to work more efficiently are:

- Machines and work tools can be rented on daily, weekly, or monthly rates to meet your agency's needs.
- Supplement your agency's core fleet by renting equipment that you don't regularly use. This includes work tools such as hammers, augers, plate compactors, and cold planers for specialized work.
- Renting helps your agency's budget. You pay only when equipment is needed for a particular job. There's no capital investment, or unexpected repair costs.
- Eliminate storage and maintenance costs by renting. There's no need to store or maintain machines and work tools that your agency seldom uses.
- Renting at The Cat Rental Store means you'll be operating machines featuring the latest technology. This enables your workers to complete their work more efficiently.
- When your agency rents, you're able to try machines before purchasing. What better way to test equipment than to rent?

Contact our dealership to learn how the Cat Rental Store can help your agency work more efficiently and stay within budget. \circledast



BACKIOELOADERS

CENTER PIVOT MODELS DELIVER PERFORMANCE AND COMFORT

The new Cat[®] 440 and 450 backhoe loaders are center pivot models, which provide your agency with industry-leading lifting performance, high breakout forces, and improved operating comfort and ergonomics.

The new addition to the Cat Backhoe Loader lineup, the 440, boasts a 25 percent backhoe lifting improvement over the 430F2. The redesigned, single-tilt loader arms provide parallel lift and versatility in a multitude of applications. The 450 increases backhoe lifting capacity by 15 percent compared to the 450F, and introduces an all-new cab for improved operator comfort and efficiency.

Lift and tilt breakout forces have significantly increased on both the 440 and 450 to improve machine productivity. A more balanced weight design and longer, backhoe-stabilizer legs improve operating stability.

Model	440	450
Engine Model	Cat C4.4 ACERT™	Cat C4.4 ACERT
Net Power	109 hp	128 hp
Operating Weight	21,825 lb	24,118 lb
Loader Lift Capacity @ Max Height	8,862 lb	8,963 lb

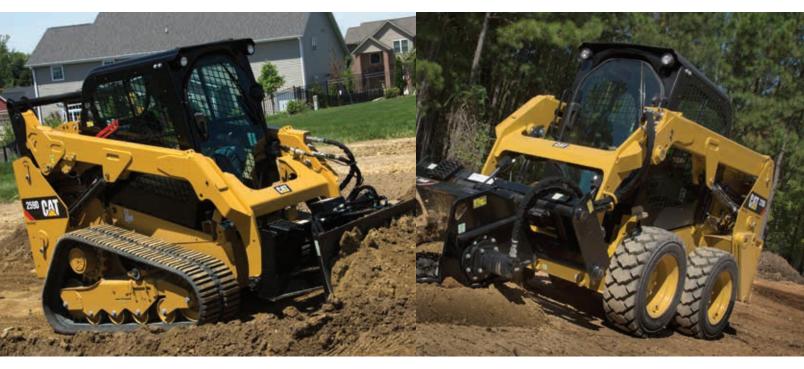
Improved Operating Efficiency

The operator station features seat-mounted controls to provide a comfortable operating position and reduce operator fatigue. Imbedded electronic sensors automatically detect seat position, so controls stay with the operator regardless of forward or reverse operation. This eliminates the pilot control pods for backhoe operation, and significantly increases legroom at the cab's rear.

Both the 440 and 450 backhoe loaders are built with common single-tilt loader arms. Electrical sensors positioned at the tilt and lift arm enable parallel arm movement for increased material retention.

Visit our dealership or **Cat.com** for more information about the improved performance and comfort of the new 440 and 450 backhoe loaders. ®





TRACKS VS. WHEELS

SELECTING THE RIGHT COMPACT LOADER FOR YOUR AGENCY'S NEEDS

Compact machines are becoming an integral part of many governmental agency's fleets. Terrain, ground speed, traction, and load-handling capabilities are important considerations. All may be important factors, but the most significant decision when selecting a compact machine—tracks or wheels?

Compact track loaders provide more traction, less ground disturbance, better material retention and enhanced lifting capacities, but typically cost more to own and operate. Wheeled machines have the lower operating cost, and excel in applications where the ground conditions are firm and higher travel speed is required. Wheeled machines weigh less than track units, providing greater flexibility when transporting. When comparing equivalent skid steer loader and compact track loader models, the track machine will typically provide about 30 percent more tipping load capacity due to its heavier undercarriage and increased stability. That means a track machine can use a higher capacity bucket and move more material per pass.

Visit our dealership to learn whether a wheeled or compact track machine is the best choice for your agency's applications. The second second

A COUPLE OF QUESTIONS TO ASK:

PAVED SURFACES OR OFF ROAD? If

crews work primarily on concrete or asphalt, a wheeled loader might be the better option, as these surfaces can cause track wear. Because track loaders have lower ground pressure, they can operate in places a skid steer loader can't due to wet or sensitive ground conditions.

MORE IMPORTANT: Maintenance and owning costs or machine versatility? Track machines may have higher maintenance and operating costs than wheeled machines, but they enable your agency to complete a greater variety of jobs.



CUSTOMIZED TO MEET YOUR AGENCY'S NEEDS

A Customer Support Agreement (CSA) is any arrangement between your governmental agency and our Cat[®] dealership to keep costs low and your equipment in optimal condition. Agreements are tailored to meet your specific needs, and can range from simple Preventive Maintenance Kits to sophisticated Total Cost Performance Guarantees.

When your agency has a CSA with our dealership, trained dealer technicians assist you by maintaining your equipment and driving down operating costs. CSA benefits include:

AGREEMENT FLEXIBILITY – Support level meets your agency's requirements and capabilities.

ACCURATE TESTING – Caterpillar trained technicians have the knowledge, technology, and support network to effectively service your fleet.

EARLY WARNING – Advanced diagnostics identify problems early to schedule repairs at your convenience.

INCREASED UPTIME – Engines and other components run more efficiently and reliably, improving uptime.

Visit our dealership to learn how a CSA can help improve your agency's efficiency and contain costs. ®

FACT-BASED TIMELY DECISIONS

Effective fleet management is essential to the success of any governmental agency. Cat Product Link[™] wirelessly connects you to your equipment, providing valuable insight into how your machine or fleet is performing.

Information such as location, hours, fuel usage, productivity, idle time, and diagnostic codes are made available through online web applications. This enables you to make timely, fact-based decisions to maximize efficiency and lower the cost of owning and operating your fleet. Cat[®] Product Link[™] remote monitoring helps you take the guesswork out of asset management. Using telematics, you know where your equipment is, what it's doing and how it's performing. You can maximize efficiency, increase productivity and lower operating costs.

Product Link is deeply

integrated into Cat equipment, interacting with engine, transmission and implement control systems to help remove the guesswork from equipment management. Product Link is standard on many Cat machines commonly used by governmental agencies.

Contact our dealership to learn how Product Link can help you better manage your fleet and lower operating costs. 👁



THE DIFFERENCE IS CLEAR

Other brands possibly will fit, but Cat[®] Filters protect your engine, drive train and hydraulic systems and components better. Our advanced design delivers maximum filtration efficiency and protection for your machines. For you, that means more uptime and lower owning and operating costs.

A: NO FLEXING

Spiral roving eliminates pleat movement and keeps contaminants from working their way into the clean side of the filter. Testing shows filters with spiral roving have 45% lower particle counts than others. Other brands often flex as fluid travels through them, releasing contaminants that can cause wear.

B: NO BUNCHING

Acrylic beads rigidly maintain pleat spacing and maximize the filter's surface area—capturing and holding contaminants until the required change interval. Pleat bunching is common in lower-quality brands, allowing contaminants to circulate, causing clogs and shortening filter life.

C: NO METAL CONTAMINATION

Fiberglass-reinforced nylon center tubes eliminate metal contamination and are 30 percent stronger than metal tubes, helping prevent collapse during pressure spikes or cold starts. In other brands, metal center tubes often carry metal contaminants left over from manufacturing, which can cause wear.

D: NO GAPS

Molded end caps completely seal the clean side from the dirty side, eliminating gaps and keeping contaminants where they belong. Other brands have metal end caps glued on top of filter pleats—creating gaps that allow contaminants to reenter from the clean side. The second se





EXTENDED WARRANTY FOR COMPACT MACHINES

To help keep machine uptime high, Caterpillar is offering an extended standard machine warranty of 24 months or 2,000 hours for Cat[®] Skid Steer Loaders, Compact Track Loaders, Multi Terrain Loaders and Mini Excavators in the United States and Canada.

The extended standard warranty helps protect your agency against unforeseen expenses created by repair costs and downtime. Plus, the new, 2-year warranty delivers greater value, since warranted, dealer-serviced machines command greater value at trade-in time.

Beyond the standard 24-month/2,000-hour warranty, Cat Financial Services provides a full range of Equipment Protection Plans (EPP), which are offered with coverage terms starting at 36 months/500 hours for parts and labor.

For more information about Cat compact equipment or the new, 2-year standard machine warranty, contact our dealership. ®



APWA CALENDAR

Upcoming training and education programs from the American Public Works Association (APWA) include:

FEB. 14, 2019

The Second Annual APWA Ice Fishing Outing will be held in Sturgeon Bay, Wis.

MAY 19-22, 2019

The 2019 North American Snow Conference will be held in Salt Lake City, Utah.

SEPT. 8-11, 2019

The Public Works Expo (PWX) will be held in Seattle.



For more information or to register online, visit **APWA.Net/Events**. Questions? Call the APWA's Education Department at 800.848.2792.

NIGP CALENDAR

Training and educational programs offered by the National Institute of Governmental Purchasing (NIGP) include:

JAN. 9-11, 2019

The class, Introduction to Public Procurement, will be held in Baltimore.

APRIL 22, 2019

The course, Legal Aspects of Public Procurement, will be held in Des Moines, Iowa.

AUG. 25-28, 2019

Forum 2019 will be held in Austin, Texas.



For additional information or to register online, visit **nigp.org**. More details are also available by calling 703.736.8900.

ITTAKES A PARSE

Dealer services, experienced employees help meet challenge of heavily traveled roadway system

HARVEST IS A BUSY TIME OF THE YEAR IN FRANKLIN PARISH, LOUISIANA. FARMERS WORK LONG HOURS TO BRING CORN, RICE, AND OTHER ROW CROPS TO MARKET IN THE LARGELY AGRICULTURAL PARISH. COTTON WAS ESPECIALLY STRONG THIS SEASON.



That means lots of heavy equipment on parish roadways. "Just about every farmer has three or four big trucks that run wide open when they're harvesting," says Beau Hill, superintendent, Franklin Parish Police Jury. "There's tractors, combines, harvesters—every farmer has at least one harvester."

Heavy traffic on the 325 miles of unpaved roadway and 231 miles of paved roads maintained by the parish's highway department keeps motor grader operators busy. Work includes adding gravel to unpaved roadways, maintaining proper drainage, building shoulders, as well as spreading hot mix for asphalt patches and preparing roads for chip sealing.

"When aggregate gets beat to the side, we cut it down. If there's not enough rock, we have to add some," says Ernie Harris, operator. "With all this farm land, there's a lot of erosion. There's constant maintenance to keep proper drainage."



Gumbo, a black mud common in Louisiana, presents a challenge in large sections of the parish. "It's a clay that never dries," Hill says. "Gravel will disappear in it. It requires more maintenance than other unpaved roads."

To meet these challenges, Franklin Parish's four motor graders (two Cat® 12M3s and a pair of 140M3s) each work approximately 1,500 hours annually.

The motor graders are leased from Louisiana Cat through Cat Financial, which streamlines the leasing process. "It's easy," Hill says. "Instead of financing at another place, everything is done through Caterpillar. It makes it a lot simpler, and saves us time."

The parish generally leases motor graders for three years. Warranties cover the machines as long as Franklin Parish leases the machines, so there are no unexpected repair costs. And operators work with up-to-date motor graders with the latest design features. "Leasing keeps our operators in better equipment," Hill says. "That keeps the operators happy."

Up and Rolling

S•O•SSM Fluids Sampling helps keep uptime high and problems from escalating. "If technicians at Louisiana Cat find an irregularity in a sample, they're able to identify the problem and fix it right away. Before we know it, the machine is back up and rolling," says Chuck Franklin, the parish's shop foreman.

VisionLink[®] is another way that Louisiana Cat monitors machine performance to prevent small problems from becoming large ones.

Dealership service includes Louisiana Cat

CAT[®] FLEET

12M3 Motor Grader (two) 140M3 Motor Grader (two) **D6N Dozer 326F Hydraulic Excavator 307E2 Hydraulic Excavator CV36B Vibratory Compactor**

employee and parish resident Ralph Sanders handdelivering parts to the parish shop. "By 6:30 in the morning, he's here with the parts, drinking coffee in his truck and waiting for someone to let him in," Hill says. "It's good, down-home, local service."

Parish employees do their part to help keep machine uptime high by replacing fluids at the intervals recommended by Caterpillar, and using Cat oil and filters. Operators keep a close eye on machines to spot any potential problems. "If there's a slight difference in the noise the machine makes, the operator notices," Hill says.

That's how the roads department meets the challenge of maintaining the parish's roadways, even those in the gumbo. 🕏



JOBSITE WORKHORSES

FIVE-SEAT UTILITY VEHICLES EXPAND CAT UTV FAMILY

Utility vehicles carry heavy loads, everything from your agency's workers to tools and materials, at speeds reaching 45 mph. To expand the Cat[®] UTV family, a pair of five-seat models (the gasolinepowered Cat CUV85 and diesel-powered CUV105 D) have been introduced.

To accommodate up to five people, both feature a spacious second row. The new models join a pair of two-seat models (the gas-powered CUV82 and diesel-powered CUV102 D).

The CUV85 and CUV105 D feature a rugged steel cargo bed for long-lasting durability. Both machines feature 1,000-pound total rear cargo capacity and 2,000-pound towing capacity for outstanding performance in a variety of applications. Features such as smooth acceleration, clear sightlines and engine braking capability make the Cat UTVs well suited for hauling and towing.

• The CUV85 is powered by a three-cylinder gasoline engine delivering 50 hp, while a three-cylinder diesel engine delivers 25 hp power to the CUV105 D. The choice of two-wheel drive, four-wheel drive or fourwheel drive/lock modes enables drivers to match vehicle drive to ground conditions.

Visit your participating UTV Caterpillar dealer or **Cat.com** to learn more about the ways the family of Cat UTVs can benefit your agency. **D**

CUV85 AND CUV105 D FEATURES:

- Four-wheel independent suspension system with a front sway bar provides stability at full load.
- Long swing-arm suspension, customtuned springs and shocks deliver a balance between a smooth ride and hauling loads.
- Ample ground clearance ensures that the vehicles easily navigate rough terrain.
- The intuitive column shifter enables easy maneuverability through all gears.
- Both models feature a continuously variable transmission, tuned specifically for work applications, to provide smooth operation.
- Easily accessible service points simplify vehicle maintenance.



SIDE UP

SAFE MACHINE OPERATION ON SLOPES

Working on sloped surfaces can be challenging. With some simple precautions, this hazardous work can be made much safer. **Ten tips** for safe machine operation on embankments:

- Before starting, inspect the hill for voids, pits, and newly filled material. Check for any obstructions that could cause a sudden stop or topple when struck.
- Inspect the condition of the cab's ROPS, if applicable, for wear or cracks in the structure. Replace or repair worn parts before beginning work.
- 3. Always wear the seat belt or safety harness.
- 4. Don't operate on grades greater than 4:1.
- Always work 90 degrees to the slope face (up and down). Don't operate machines side-to-side along the embankment.
- 6. Keep the machine's load properly balanced, and don't overload the equipment. Consult the operator's manual for the machine's maximum operating weight.
- Work only where there is good traction. Avoid slippery, wet, muddy and icy areas.
- Operate in the proper gear, so the machine doesn't jerk or move uncontrollably. Operating the throttle at 2/3 power is recommended for maintaining control on a slope.
- **9.** Don't jump out of a tipping or rolling machine. Stay in the cab, if the machine begins to roll.
- 10. Never operate while impaired by alcohol or drugs.

Consult the operator's manual to learn more about safe equipment operation on slopes. ${\mathfrak B}$

CAT.COM/SAFETY



CATERPILLAR UNIVERSITY PROVIDES OPERATOR, SAFETY, AND SERVICE TRAINING

Improving your staff's knowledge of machine operation, safety, and service not only makes them better employees, but improves your agency's efficiency and fleet uptime. Convenient, cost-effective, online training is available at **CaterpillarUniversity.com**. E-learning courses available through Caterpillar University include:

SERVICE – More than 180 courses to help keep your fleet in top shape:

- Basic Air Conditioning
- Brake Fundamentals
- Electrical Fundamentals
- Hydraulic Service
- Preventive Maintenance

OPERATOR TRAINING – Eighteen courses that focus on the basics of operating Cat machines. Courses include:

- Backhoe Loaders
- Dozers
- Motor Graders
- Wheel Loaders

SAFETY – More than 174 courses demonstrate best practices. Classes include:

- Above ground Storage Tank Requirements
- Back Injury Prevention
- Electric Shock
- Operator Visibility for Heavy Equipment
- Trenching and Excavating Safety

STRATEGIES FOR SAFETY MANAGERS – Safety knowledge, teamwork, performance, and communications are among the topics covered in three sets of courses:

- Strategies for Safety Managers
- Effective Communication
- Near Miss Reporting

VISIT CATERPILLARUNIVERSITY.COM OR OUR DEALERSHIP TO LEARN ABOUT THE VIDEOS, INTERACTIVE TRAINING, VIRTUAL SIMULATIONS, AND RESOURCE LIBRARY AVAILABLE ONLINE TO TRAIN YOUR EMPLOYEES.

NEW CAT TRADE DRESS

Newly manufactured Cat[®] machines, engines, generator sets and work tools will soon have a new look. Caterpillar is replacing the current "Power Edge" trade dress (Cat trademark on a black background accented with a diagonal red bar) with a fresh

THE CAT MODERN HEX DESIGN COMBINES THE TRADITIONAL CAT TRADEMARK AND PRODUCT MODEL NAMES WITH A BOLD, THREE-DIMENSIONAL RED HEXAGON AND GRILLE PATTERN. new graphic design called "Cat Modern Hex." The red color is a throwback to the graphics used on the company's very first crawler tractors in 1925.

The Cat Modern Hex was designed by the Caterpillar Industrial Design Group. "Our goal was to create something with a premium look and feel," said Ed Stembridge, product identity manager. "When you combine the Modern Hex design with our distinctive Cat product designs, it visually reminds customers they are buying and using the best products on the market."

In addition to machines, gen sets and engines, the new trade dress will be used on Cat parts packaging

and various licensed products such as toys and scale models. Cat products that are no longer in production will not be updated.

LOOK FOR THE MODERN HEX DESIGN ON NEWLY MANUFACTURED CAT PRODUCTS IN THE NEAR FUTURE AS CATERPILLAR UPDATES ITS WHOLE PRODUCT LINE BY EARLY 2020.





NEW CAT THEME LINE LET'S DO THE WORK.

It's a way of life for the people who do what needs to be done.

It's time to celebrate the people who do what it takes to move our world forward, to stand in support of those who roll up their sleeves and do the work. A community of people with relentless drive and a commitment to get things done. The ones who get up and get to work. The ones who make things and make things happen.

This is who we serve. This is who we are. That's why Caterpillar is dedicated to building the best products and services for you we're here to help.

Stop in at our dealership to check out what's new or email us and tell us what you're working on.



It's a Mantra. It's a way of life. A powerful call to action for the people who do what needs to be done.



CAT FINANCIAL PROVIDES NUMEROUS OPTIONS FOR GOVERNMENTAL BUYERS

A wide variety of **financing options** is available from Cat Financial for all types of state and local governmental agencies.

Financing options available to agencies include: non-appropriations clauses, extended protection and insurance services, low interest rates, and **tax-exempt options** when financing new or used equipment.

Or consider a **governmental lease** or tax lease, either of which can be cancelled without penalty on the last day of an appropriations period, if funding isn't approved for the following year.

Contact our dealership or visit **Cat.com/governmental** to learn more about the financing options available from Cat Financial that help achieve your agency's budgetary objectives.

Cat.com/governmental

