

#### TAX

# **Cost Segregation Applied**

## A taxpayer can substantially increase cash flow by segregating property costs.

BY JAY A. SOLED AND CHARLES E. FALK AUGUST 2004

### EXECUTIVE SUMMARY

• COST SEGREGATION CAN PROVIDE REAL ESTATE purchasers with tremendous tax benefits from accelerated depreciation deductions and easier write-offs when an asset becomes obsolete, broken or destroyed.

• CPAs CAN RECOMMEND USING THE cost segregation technique when a taxpayer constructs a building or buys an existing one. It can be used even if a structure was acquired several years earlier.

**BUYERS OF REAL ESTATE SHOULD OBTAIN** an engineering report that segregates assets into four categories: personal property, land improvements, building components and land.

• ONE OF THE AREAS OF CONTROVERSY is the distinction between tangible personal property and a building's structural components. The Tax Court has set forth criteria CPAs can use in making a factual determination of whether property is inherently permanent and therefore excluded from the definition of tangible personal property.

• ADVANTAGES OF COST SEGREGATION include the value of front-loaded depreciation deductions, write-offs of building components that need replacement and lower local realty-transfer taxes.

**DISADVANTAGES INCLUDE THE COST OF THE** engineering study, the triggering of depreciation recapture and understatement penalties for taxpayers that use cost segregation too aggressively.

JAY A. SOLED, JD, is an associate professor of taxation at Rutgers University in Newark, New Jersey. His e-mail address is jaysoled@andromeda.rutgers.edu . CHARLES E. FALK, CPA, JD, is an executive in residence at Seton Hall University in South Orange, New Jersey. His e-mail address is cefalk25@aol.com .

urchasers of real estate can gain tremendous tax benefits by using a popular asset depreciation technique called cost segregation. Using this method, buyers view a real estate acquisition as consisting not only of land and buildings but also tangible personal property and land improvements. The tax savings come from accelerated depreciation deductions and possible easier property write-offs. A taxpayer can use cost segregation when constructing a building, buying an existing one, or, in certain circumstances, years after disposing of one so long as the year of disposition still is open under the statute of limitations (see revenue procedure 2004-11).

#### Present-Value Savings Each \$100,000 in assets reclassified from a 39-year recovery period to a five-year recovery period results in approximately \$16,000 in net-present-value savings, assuming a 5% discount rate and a 35% marginal tax rate.

Source: BKD LLP.

CPAs play a central role in the cost segregation process. They are the most likely people to recommend use of the technique to their clients or employers. CPAs also will review and implement the findings in the required engineering report. This article will guide CPAs through the process by discussing how cost segregation operates, providing a comprehensive example of the technique in a real estate acquisition and outlining its advantages.

#### **A BRIEF HISTORY**

Under prior law taxpayers would separate a building's parts into its various components—doors, walls and floors. Once these components were isolated, taxpayers would depreciate them using a short cost-recovery period. CPAs referred to this practice as component depreciation.

The introduction of the accelerated cost recovery system (ACRS) and the modified accelerated cost recovery system (MACRS) eliminated the use of component depreciation, but not the use of cost segregation. *Hospital Corporation of America [HCA]* v. *Commissioner*, 109 TC 21 (1997), is the seminal cost segregation case. In it the Tax Court permitted HCA to use cost segregation with respect to a multitude of improvements (see exhibit 1). Critical to the Tax Court's analysis was that in formulating accelerated depreciation methods, Congress intended to distinguish between components that constitute IRC section 1250 class property (real property) and property items that constitute section 1245 class property (tangible personal property). This distinction opened the doors to cost segregation.

Armed with this victory, taxpayers have increasingly begun to use cost segregation to their advantage. The IRS reluctantly agreed that cost segregation does not constitute component depreciation (action on decision (AOD) 1999-008). Moreover, cost segregation recently was featured in temporary regulations issued by the Treasury Department (regulations section 1.446-1T). In a chief counsel advisory (CCA), however, the IRS warned taxpayers that an "accurate

cost segregation study may not be based on noncontemporaneous records, reconstructed data or taxpayers' estimates or assumptions that have no supporting records" (CCA 199921045).

Exhibit 1 : Some Property Improvements Pass Muster							
In Hospital Corporation of America v. Commissioner, the Tax Court permitted use of the cost segregation technique for these building improvements.							
	5-year depreciable life	39-year depreciable life					
Primary and secondary electrical distribution systems	Х						
Branch electrical wiring and connections special equipment		Х					
Wiring and related property items in the laboratory and maintenance shop	X						
Other wiring and related property	Х						
Wiring to television equipment	Х						
Conduit, floor boxes and power boxes	Х						
Electrical wiring relating to internal communications	X						
Carpeting	Х						
Vinyl wall and floor coverings	Х						
Kitchen water piping and steam lines	X						
Special plumbing to X-ray machines	Х						
Kitchen hoods and exhaust systems	X						
Patient corridor handrails	Х						
Overhead lights		Х					
Accordion doors and partitions	Х						
Bathroom accessories and mirrors		Х					
Acoustical tile ceilings		Х					
Steam boilers		Х					

### HOW THE TECHNIQUE WORKS

The process of cost segregation begins at the time of purchase. Accounting professionals should advise clients or employers buying real estate to use an engineering report to segregate assets into four categories:

■ Personal property.

■ Land improvements.

■ Buildings (which should be further broken down into component parts).

Land.

This allows a purchaser to achieve faster depreciation deductions as well as possible and easier subsequent write-offs, so its cash flow will be increased. Assets allocated into the first two categories enjoy relatively short useful lives and, thus, accelerated depreciation methods. Furthermore, if the components of a building have been separately valued and a component subsequently becomes worthless, the taxpayer can write it off more easily.

*Personal property.* Taxpayers normally can depreciate this property using a five- or seven-year recovery period and the double-declining method. Within permissible bounds, there is a huge tax-savings premium for valuing this property as high as possible. This category includes items such as furniture, carpeting, certain fixtures and window treatments.

*Land improvements.* Like the first category, these have a relatively short useful life—15 years—and are subject to an accelerated depreciation method, namely the 150% declining-balance method. Again, within permissible bounds, purchasers should maximize the values they attribute to this category, which ordinarily includes items such as sidewalks, fences and docks.

*The building.* As in the first and second categories, buyers should attempt to maximize a building's value; any residual value will be allocated to nondepreciable land. Although a building's separate components (such as its roof) all are considered part of the building itself, there is merit to valuing and depreciating each component separately (albeit, on the same depreciation schedule). This way, if one of the building's components subsequently becomes worthless, the taxpayer can write it off immediately.

*Land.* Whatever amount of the purchase price is not accounted for in the three prior categories is allocated to land. Land valued in this residuary fashion may have a relatively low or insignificant value, but proper documentation normally will protect a taxpayer from an IRS challenge.

### THE HARD PART

One of the trickier aspects of cost segregation is the actual categorization of property. Distinguishing between tangible personal property and a building made up of its structural components is an area of great controversy. IRC section 1245(a)(3) and Treasury regulations section 1.1245-3(b)(1) say the distinction between tangible personal property and structural components should be based on the criteria once used to determine whether property qualified for the now repealed investment tax credit under IRC section 38.

The Treasury regulations found under IRC section 48 delineate this distinction. Treasury regulations section 1.48-1(c) defines tangible personal property as all property "except land and improvements thereto, such as buildings or other inherently permanent structures (including items which are structural components of such buildings or structures)." That section further defines *tangible personal property* as "all property (other than structural components) which is contained in or attached to a building." Examples of such property, it says, consist of printing presses, transportation and office equipment, refrigerators and display racks.

Treasury regulations section 1.48-1(e)(2) classifies as *structural components* any property that "relates to the operation or maintenance of a building," and includes, by way of example, parts of a building (walls, floors and ceilings), as well as any permanent coverings (paneling, windows and doors), components of a central air conditioning or heating system (motors, pipes and ducts), plumbing and fixtures (sinks and bathtubs), electrical wiring and lighting fixtures, stairs and elevators and sprinkler systems.

CPAs may want to read Senate report 1881, which accompanied the Revenue Act of 1962, and Senate report 95-1263, which accompanied the Revenue Act of 1978, which both amplify and elucidate the distinction between tangible personal property and structural components.

In distinguishing between a building's tangible personal property and structural components, CPAs will find the courts to be a final source of guidance. In *Whiteco Industries, Inc.* v. *Commissioner* (65 TC 664 (1975)), for example, the Tax Court set forth the following six questions CPAs can use to determine whether property is inherently permanent and thus a structural component excluded from the definition of tangible personal property:

- Can the property be moved? Has it been moved? (For example, a shed with a concrete floor vs. a shed with a wooden floor.)
- How difficult is removal of the property, and how time-consuming is it? (For example, a wine cellar vs. a prefabricated photo-processing lab.)
- Is the property designed or constructed to remain permanently in place? (For example, a wooden barn vs. a wire chicken coop.)

Are there circumstances that tend to show the expected or intended length of affixation—or that the property may or will have to be moved? (For example, permanent concrete pilings vs. floating docks that can be removed in the winter.)

How much damage will the property sustain upon its removal? (For example, a steel-encased bank vault vs. an easily removable lighting system attached by bolts.)

■ How is the property affixed to the land? (For example, permanently glued bathroom tile vs. removable billboard.)

Even with ample regulatory, legislative and judicial guidance, making the distinction between tangible personal property and a building's structural components remains a challenge for CPAs. No bright-line test exists. What is fortunate, however, is that many of the factual issues involving properties of different sorts have been litigated, and their outcomes illuminate the direction a court confronted with similar facts is likely to take. Examples of how the courts viewed various categories of property are provided in "Categorizing Property: Court Rulings," below.

#### **COST SEGREGATION EXAMPLE**

A thorough analysis of the facts of each situation helps CPAs quantify the present-value tax savings associated with using cost segregation.

Consider the following example based on an actual cost segregation engineering report. Suppose a taxpayer purchases a nonresidential building for \$12,135,000 (assume the land is owned by an independent third party). If the taxpayer does not use cost segregation, it must use straight-line depreciation over 39 years.

In contrast, suppose the accounting professional advises his or her client or employer to retain an engineering consultant to prepare a cost segregation study. The engineer's report shows that of the total purchase price, \$11,285,000 should be allocated to the building, \$50,000 to 15-year property and \$800,000 to 5-year property. Allocating part of the purchase price to these two additional property categories results in tremendous tax savings. Assuming a 35% tax rate and a 5% discount rate, the cost segregation study produces \$133,563 of tax savings. Exhibit 2 illustrates the yearly savings.

#### WHEN TO APPLY THE TECHNIQUE

CPAs should keep three additional things in mind. First, the 2001 and 2003 tax acts made cost segregation more valuable. If real property is reclassified as 5-, 7- and 15-year personal property, it may qualify for 30% and 50% bonus depreciation. This bonus depreciation applies to new property in the first year it is placed in service. The magnitude of this additional allowance in the first year can be enormous. For example, a shift of \$1 million from 39-year property to 5-year property can augment first-year depreciation deductions by a whopping \$575,000 (\$25,000 vs. \$600,000). The resulting cash flow can provide the capital for numerous other projects. (Practitioners should be aware, however, that the application of alternative minimum tax—which in certain instances mandates slower depreciation methodologies—may reduce some of the tax savings associated with cost segregation.)

Second, cost segregation is applicable not only when taxpayers acquire new or existing structures but also when they previously had acquired or improved a structure and have the proper engineering report to justify cost segregation. (If, however, the real property in question was put into service too many years ago—commonly 10—there may be insufficient adjusted basis remaining to justify using cost segregation.)

Third, regulations issued in March 2004 sanction the use of cost segregation years after a real estate acquisition. Treasury regulations section 1.446-1T(e) (5)(iii), example 9, posits a situation where a cost segregation study was conducted four years after an initial building acquisition; the study showed the taxpayer had missed opportunities to take enhanced depreciation deductions. Under these circumstances the taxpayer was permitted to make an IRC section 481 adjustment all in the year it changed its method of depreciation. These changes in methodology, however, require that the taxpayer in a timely manner file form 3115 for permission to change its depreciation accounting method, which is granted automatically under current revenue procedures.

Today virtually all real-property purchases entail the simultaneous acquisition of tangible personal property. For that reason CPAs should routinely recommend the use of cost segregation studies whenever the expenditures for an acquisition, including leasehold improvements, equal or exceed \$750,000.



AICPA National Real Estate Conference November 7–9, 2004 Renaissance Esmeralda Resort and Spa Indian Wells, California

#### **AICPA National Construction Industry Conference**

December 2–4, 2004 Marriott New Orleans, New Orleans

For more information or to register, go to www.cpa2biz.com or call the Institute at 888-777-7077.

#### ADVANTAGES AND DISADVANTAGES

The benefits of cost segregation overwhelmingly outweigh the drawbacks. When it comes to real estate acquisitions, the jewel of cost segregation is that it yields enhanced depreciation deductions. As evidenced by the above example, there can be astounding differences in outcomes between using and not using it. The major advantage of cost segregation is not necessarily that it will produce *more* depreciation deductions (except, of course, to the extent depreciable basis has been allocated away from the land element of the purchase). Instead, due to the time value of money, the advantage of these front-loaded deductions will be quantifiably greater than had the deductions been spread over longer periods of time using slower depreciation methods.

Another advantage of using cost segregation is that if a building component subsequently needs replacement, taxpayers can write off its remaining tax basis. To illustrate, suppose a cost segregation study showed the initial value of a roof to be \$500,000. Two years later, when the roof has an adjusted tax basis of \$480,000, it needs to be replaced. The taxpayer could deduct a \$480,000 loss. Had the taxpayer not done the cost segregation study, the outcome would have been vastly different; no loss could be taken because the roof's tax basis and the basis of the building would remain intertwined.

#### **Categorizing Property: Court Rulings**

A number of court cases serve as a useful compass to help CPAs navigate the difficult (and, according to some observers, possibly treacherous) waters of distinguishing between tangible personal property and the structural components of a building.

*Partitions.* In *Metro National Corporation* v. *Commissioner* (52 TCM 1440 (1987)), the taxpayer used gypsum board partitions that were readily and cheaply moved and reused; the removal process did not damage the other partitions, ceiling, floor or building structure. The court held the partitions were tangible personal property. In *Dixie Manor, Inc.* v. *United States* (79-2 US Tax Cases 9469 (W.D. Ky. 1979)), on the other hand, the taxpayer installed the gypsum board in a manner that rendered it nonmoveable without causing significant damage to the building, and the court held the partitions constituted a structural component of the building.

*Property in the nature of machinery.* Here CPAs can compare *Weirick* v. *Commissioner* (62 TC 446 (1974)), in which the court deemed line towers, located at various points between the upper and lower terminals of a ski lift, to be tangible personal property in the nature of machinery, with *Munford, Inc.* v. *Commissioner* (849 F2d 1398 (11th Cir. 1988)), in which a specialized refrigerated warehouse had more attributes of a building than of machinery.

*Wall coverings.* On this issue practitioners can compare *Hospital Corporation of America* v. *Commissioner* (109 TC 21 (1997)), where easily removed vinyl wall coverings were held to be tangible personal property, with *Duaine* v. *Commissioner* (49 TCM 88 (1985)), where tiles glued to the walls and floors of a fast-food restaurant were held to be structural components of the building.

Lighting. In Morrison, Inc. v. Commissioner (891 F2d 857 (11th Cir. 1990)), the court ruled lighting fixtures and electrical connections that did not

provide basic illumination and were accessory to a business were tangible personal property. In *Duaine* v. *Commissioner*, however, it found decorative lighting fixtures to be structural components because they provided the building's only light.

*Electrical systems.* For guidance in this area, CPAs can compare *Scott Paper Co.* v. *Commissioner* (74 TC 137 (1980)), where the portion of the taxpayer's primary electrical distribution system that did not relate to the overall operation or maintenance of buildings was held to be tangible personal property, with *Hospital Corporation of America*, where part of the electrical system used to power employee personal equipment or equipment relating to the operation or maintenance of the building (an elevator) was deemed a structural component of the building.

Cost segregation also may result in lower local realty-transfer taxes. Localities often impose these taxes based on a building's fair market value. When a cost segregation study reduces a building's value, this produces a corresponding reduction in the amount of the transfer tax due (and a potential reduction of annual real estate taxes as well).

The process of cost segregation has shortcomings, however. First, and most easily quantifiable, is the actual cost of the engineering study. While the fees vary widely, a well-done study is not inexpensive: A typical cost segregation study and written report will cost between \$10,000 and \$25,000. Cost factors are the property's location, whether the building is new or existing, the nature of the property (residential vs. nonresidential) and time pressures for completion of construction. As in any investment, the taxpayer must conduct a cost-benefit analysis. From the time of its initial commission, a cost segregation study should take about four to six weeks to complete. A business entity can deduct the cost of the study as a business expense under IRC section 162.

A second disadvantage is that the subsequent disposition of the real estate acquisition likely will trigger the tax code's recapture provisions. For tangible personal property, IRC section 1245 will apply, so the taxpayer must recognize ordinary income, potentially subject to the top marginal tax rate (in 2004, 35%). Installment sale treatment also will not be available with respect to the recapture. With real property, IRC section 1250 will apply, so the taxpayer must recognize unrecaptured section 1250 gain, taxed at 25%. (In practice the contract for sale usually can be adjusted to allocate less of the purchase price to recapture items.)

Another disadvantage is that taxpayers who use cost segregation too aggressively, or who receive misinformation in their engineering report, may be subject to penalties. There is a 20% penalty on the portion of any tax underpayment from a "substantial valuation overstatement" (IRC section 6662(a)). A valuation overstatement occurs if the valuation is 200% or more than the amount determined to be the correct amount (IRC section 6662(e)(1)). This penalty will not apply, however, if the overvaluation does not result in a substantial misstatement of taxes—that is, exceeding \$5,000 (IRC section 6662(e)(1))—or the taxpayer can show reasonable cause and that it acted in good faith (IRC section 6664(c)(1)).

Some taxpayers are reluctant to use cost segregation, equating it with a high-risk tax shelter. In truth, this reluctance is misplaced. If the cost of the components in the engineering report is well-documented, the cost segregation technique is no more aggressive than using a permissible depreciation method under the Internal Revenue Code. Patrick Malayter, CPA, a partner with BKD LLP, who heads up one of the nation's largest cost segregation practices, agrees. "In a well-prepared engineering-based report," he says, "tangible property and land improvement segments of real estate may be traced to applicable construction documents, and the property unit costs are clearly determined. You will normally have great success in an IRS examination sustaining claimed tax benefits. In contrast, an accountant's ad hoc cost segregation calculation or reliance on a contractor (who typically is familiar neither with a subcontractor's

cost for specific property items nor the tax law) is a recipe for disaster on examination."

#### PRACTICAL TIPS TO REMEMBER

• CPAs should routinely recommend that their clients or employers use cost segregation studies whenever the expenditures for a structure, including leasehold improvements, equal or exceed \$750,000.

Cost segregation can be used for new construction and improvements, for the purchase of existing structures and for buildings acquired in prior tax years—even if the building has been disposed of.

- A taxpayer that uses cost segregation for a previously acquired structure must file IRS Form 3115, *Change in Accounting Method.*
- If a taxpayer disposes of a building for which cost segregation was used, it should consider the recapture considerations associated with this disposition.

Greater tax savings will be possible with an engineering report that clearly identifies property as tangible personal property rather than as structural building components.

#### **OVERLOOKED OPPORTUNITY**

Accounting professionals must be able to suggest and help implement cost segregation for their clients or employers so they can achieve maximum tax savings. In the past when taxpayers purchased real estate, they traditionally allocated 20% of the purchase price to land and 80% to buildings. While the IRS rarely questioned this simplistic approach, purchasers did themselves a financial disservice: They forfeited opportunities to achieve a better tax result.

Although the cost segregation technique always was available to real estate purchasers, it often was overlooked as a tax-savings tool. Recently, however, buyers have begun to recognize that despite some drawbacks, cost segregation can dramatically increase tax savings. They are, therefore, taking advantage of this opportunity, challenging the "business as usual" mantra.

Exhibit 2 : Straight-Line Method vs. Cost Segregation Technique

Estimate of Potential Depreciation Benefits	Estimate	of Potential	Depreciation	Benefits
---	----------	--------------	--------------	----------

	Straight-line method			egregation technique st-recovery classes		Increase/	Tax	Present	Cumulative	
			-	-			difference in	savings	value of	value of
Year	39 yrs.	39 yrs.	15 yrs.	7 yrs.	5 yrs.	Total	depreciation	at 35%	tax savings	tax savings
1	155,571	144,674	2,500	0	160,000	307,174	151,603	53,061	51,767	51,767
2	311,141	289,347	4,750	0	256,000	550,097	238,956	83,635	77,709	129,476
3	311,141	289,347	4,275	0	153,600	447,222	136,081	47,628	42,147	171,623
4	311,141	289,347	3,848	0	92,160	385,355	74,214	25,975	21,891	193,513
5	311,141	289,347	3,463	0	92,160	384,970	73,829	25,840	20,740	214,254
6	311,141	289,347	3,117	0	46,080	338,544	27,403	9,591	7,331	221,585
7	311,141	289,347	2,953	0		292,300	(18,842)	(6,595)	(4,801)	216,784
8	311,141	289,347	2,953	0		292,300	(18,842)	(6,595)	(4,572)	212,212
9	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(4,355)	207,857
10	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(4,147)	203,710
11	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(3,950)	199,760
12	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(3,762)	195,999
13	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(3,583)	192,416
14	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(3,412)	189,004
15	311,141	289,347	2,953			292,300	(18,842)	(6,595)	(3,249)	185,755
16	311,141	289,347	1,476			290,823	(20,319)	(7,111)	(3,337)	182,418
17	311,141	289,347				289,347	(21,794)	(7,628)	(3,409)	179,008
18	311,141	289,347				289,347	(21,794)	(7,628)	(3,247)	175,762
19	311,141	289,347				289,347	(21,794)	(7,628)	(3,092)	172,669
20	311,141	289,347				289,347	(21,794)	(7,628)	(2,945)	169,724
21	311,141	289,347				289,347	(21,794)	(7,628)	(2,805)	166,920
22	311,141	289,347				289,347	(21,794)	(7,628)	(2,671)	164,248
23	311,141	289,347				289,347	(21,794)	(7,628)	(2,544)	161704
24	311,141	289,347				289,347	(21,794)	(7,628)	(2,423)	159,281
25	311,141	289,347				289,347	(21,794)	(7,628)	(2,307)	156,974
26	311,141	289,347				289,347	(21,794)	(7,628)	(2,198)	154,776
27	311,141	289,347				289,347	(21,794)	(7,628)	(2,093)	152,683
28	311,141	289,347				289,347	(21,794)	(7,628)	(1,993)	150,690
29	311,141	289,347				289,347	(21,794)	(7,628)	(1,898)	148,792
30	311,141	289,347				289,347	(21,794)	(7,628)	(1,808)	146,984
31	311,141	289,347				289,347	(21,794)	(7,628)	(1,722)	145,262
32	311,141	289,347				289,347	(21,794)	(7,628)	(1,640)	143,622
33	311,141	289,347				289,347	(21,794)	(7,628)	(1,562)	142,060
34	311,141	289,347				289,347	(21,794)	(7,628)	(1,487)	140,573
35	311,141	289,347				289,347	(21,794)	(7,628)	(1,417)	139,156
36 37	311,141	289,347				289,347	(21,794)	(7,628)	(1,349)	137,807
	311,141	289,347				289,347	(21,794)	(7,628)	(1,285)	136,522
38 39	311,141	289,347				289,347	(21,794)	(7,628)	(1,224)	135,299
39 40	311,141	289,347				289,347	(21,794)	(7,628)	(1,165)	134,133
	156,056	145,125	****	40	****	145,125	(10,931)	(3,826)	(570)	133,563
	\$12,135,000	\$11,285,000	\$50,000	\$0	\$800,000	\$12,135,000				
Total %	= 100.00%	93.00%	0.41%	0.00%	6.59%	100.00%				
Assumption for cost segregation study 5 yrs. @ 200% depreciation = 7 yrs. @ 200% depreciation =				\$800	\$0 1,000 \$0 1,000		scount rate = x rate =		5% 35%	
15 yrs. @ 150% depreciation = 39 yrs. @ straight-line depreciation =					,000		mulative present			
Total depreciation using						tax savings using				
	straight-	line method =		\$12,135	,000	set	gregation techniq	ue at 5% =	\$133,563	

Copyright © 2008 American Institute of Certified Public Accountants. All rights reserved.