

# WHAT'S BEHIND CASH FLOW STATEMENTS: BASICS

## LEARNING OBJECTIVES

After completing this module you will be able to:

- Connect entries to line items on cash flow statements using a two-step process: entry-by-entry and groups of entries.
- Explain an entry's effects on an indirect cash flow statement in terms of the purpose of the reconciliation, what income measures, and the reason income differs from cash from operations.



### Key take-aways:

- Mastering cash flow statements is a two-step process: (1) Entry-by-entry analysis by connecting entries to the purpose of the statement and to the underlying business activities. (2) Group-entries analysis that affect line items by identifying entries you have learned that affect a line item and including a placeholder for possible "other" entries you haven't yet learned. Then interpret line items by connecting the collective impact of the entries to the purposes of the cash flow statement and the underlying business activities.
- Operating entries always affect the reconciliation of income to cash from operations. Specifically, they always affect one or more line items: net income, reconciliation adjustments, or net cash from operations.
- Reconciliation adjustments reflect the net effects of all operating entries. Thus, some adjustments are not really needed to reconcile income to cash from operations. In this case, there are off-setting redundant adjustments with a \$0 overall net effect.
- Reconciliation adjustments associated with assets are the *opposite*, or the negative of the net effect of the operating entries on the related assets. In particular, negative adjustments are associated with increases in the related asset and positive adjustments with decreases.
- Reconciliation adjustments associated with liabilities are the *same* as the net effect of the operating entries on related liabilities. In particular, positive adjustments are associated with increases in the related liability and negative adjustments with decreases.
- The difference between a reconciliation adjustment on the cash-flow statement and the total change in the related balance sheet item is the net effect of non-operating events, such as acquisitions or divestitures (taking into account that adjustments associated with assets are the opposite of the balance sheet effect).

- There are two key limitations of the simple EasyLearn Company examples we studied in this chapter that most likely violate related assumptions for real companies. In EasyLearn, we assumed only operating entries affect the working capital accounts. Thus, the balance sheet changes in EasyLearn's receivables and payables were the same as the reconciliation adjustment, which was the same as the net effects of operating entries. Generally, this will not be true for larger companies that have foreign operations or buy or sell other companies. In EasyLearn, we also assumed only two operating entries affected the adjustments. For example, only two operating entries affected EasyLearn's receivables and payables adjustments, which meant they can be interpreted in terms of the relative impact of only two entries. This is not true for most companies; however, in many business contexts two types of entries explain most of the impact on the adjustments and other items can be assumed to be insignificant to your analysis.
- The R&R map is a powerful conceptual tool that can help you record any entry, determine any entry's financial statement effects, create financial statements from the BSE matrix, and understand how the financial statements are related.
- The depth of your understanding of cash flow statement items depends on the entries you know, your understanding of how these entries affect the cash flow statement, the extent to which companies disclose information about these effects, and your ability to locate and interpret disclosures.
- Where are we heading? Most of the big concepts associated with cash flow statements can be explained using EasyLearn's five entries. The entry-by-entry analysis in EasyLearn apply to many entries, meaning the interpretations of the entry effects generalize. But, the EasyLearn interpretations don't apply to quite a few other entries. In the *SCF Entry Map module*, you will learn how any entry affects the statement of cash flows and how to interpret these effects in terms of the underlying business and accounting issues.

### Key terms:

- **Non-operating activities** Activities that are investing or financing; but not operating.
- **Operating activities** - Activities related to the principal revenue-producing activities of the entity and other activities that are not investing or financing activities.<sup>1</sup> Operating cash flows mostly pertain to ongoing activities in a company's primary business including events associated with research and development, purchasing, manufacturing, sales, marketing, distribution, customer collections, and support.
- **Reconciliation adjustment** - A line item in the operating section of an indirect method cash flow statement that partially explains why net income differs from net cash from operating activities.

### Key formulas:

- **Reconciliation Equation** net cash from operations = net income + reconciliation adjustments

<sup>1</sup> IASB 7, ¶ 6

### Figure 1 Entry-by-Entry Analysis of Cash flow Statements

This figure illustrates how cash flow statements can be analyzed entry-by-entry.

#### E2: Recognize \$150 revenue when sale on account occurs

Assuming E2 was the only event during the reporting period

- What would EasyLearn report on its income statement?
- What would EasyLearn report on its direct cash flow statement?
- What would EasyLearn report on its indirect cash flow statement?

#### E2 Recognize revenue

	Assets	=	Owners' Eq.
+	AR	=	+ Rev
+	+ 150	=	+ + 150

#### EASYLEARN COMPANY INCOME STATEMENT

December 1 - 31, 2012

Revenues	\$150
Advertising expense	_____
<b>Net Income</b>	<b><u>\$150</u></b>

#### EASYLEARN COMPANY DIRECT CASH FLOW STATEMENT

December 1 - 31, 2012

<b>Operating Activities</b>	
Sales collections	_____
Advertising payment	_____
<b>Net cash from operations</b>	_____
<b>Financing Activities</b>	
Sale of common stock	_____
<b>Net cash from financing</b>	_____
<b>Change in cash</b>	_____
<b>Beginning Cash balance</b>	_____
<b>Ending cash balance</b>	_____

#### EASYLEARN COMPANY INDIRECT CASH FLOW STATEMENT

December 1 - 31, 2012

<b>Operating Activities</b>	
Net Income	\$150
Receivables	(\$150)
Accounts payable	_____
Net cash from operations	\$0
<b>Financing Activities</b>	
Sale of common stock	_____
Net cash from financing	_____
<b>Change in cash</b>	\$0
<b>Beginning Cash balance</b>	\$0
<b>Ending cash balance</b>	\$0

#### EASYLEARN COMPANY SCF RECONCILIATION

December 1 - 31, 2012

	Reported	Behind Reported Numbers				
		E2	E3	E4	E5	Combined
<b>Operating Activities</b>						
Net Income	\$90	\$150				
Receivables	(\$130)	(\$150)				
Accounts payable	\$45					
Net cash from operations	\$5	\$0				

#### Interpretation

Assuming E2 was the only event during the period, here is how you could explain the reconciliation

- Explain the purpose of the reconciliation and what income measures
- Explain the reason income differs from cash for E2
  - Accounts receivable rather than cash increased by \$150. If this had been a cash sale, income and cash would have been the same
  - Stated alternatively, the \$150 increase in receivables is the reason net income exceeded net cash from operations by \$150
  - Accordingly, to reconcile the \$150 income effect of the sale to the \$0 cash effect, a reconciliation adjustment subtracts the \$150 increase in accounts receivable (for which cash has not yet been collected)

## Figure 2 Group-Entries Analysis of Cash flow Statements

This figure illustrates how cash flow statements can be analyzed by groups of entries.

### Receivables reconciliation adjustment

- What entries explain the adjustment?
- What would an outsider see?
- As an insider, how could you explain the adjustment to a prospective shareholder in terms of the purpose of the reconciliation and the underlying business activities?

#### EASYLEARN COMPANY

#### SCF RECONCILIATION

December 1 - 31, 2012

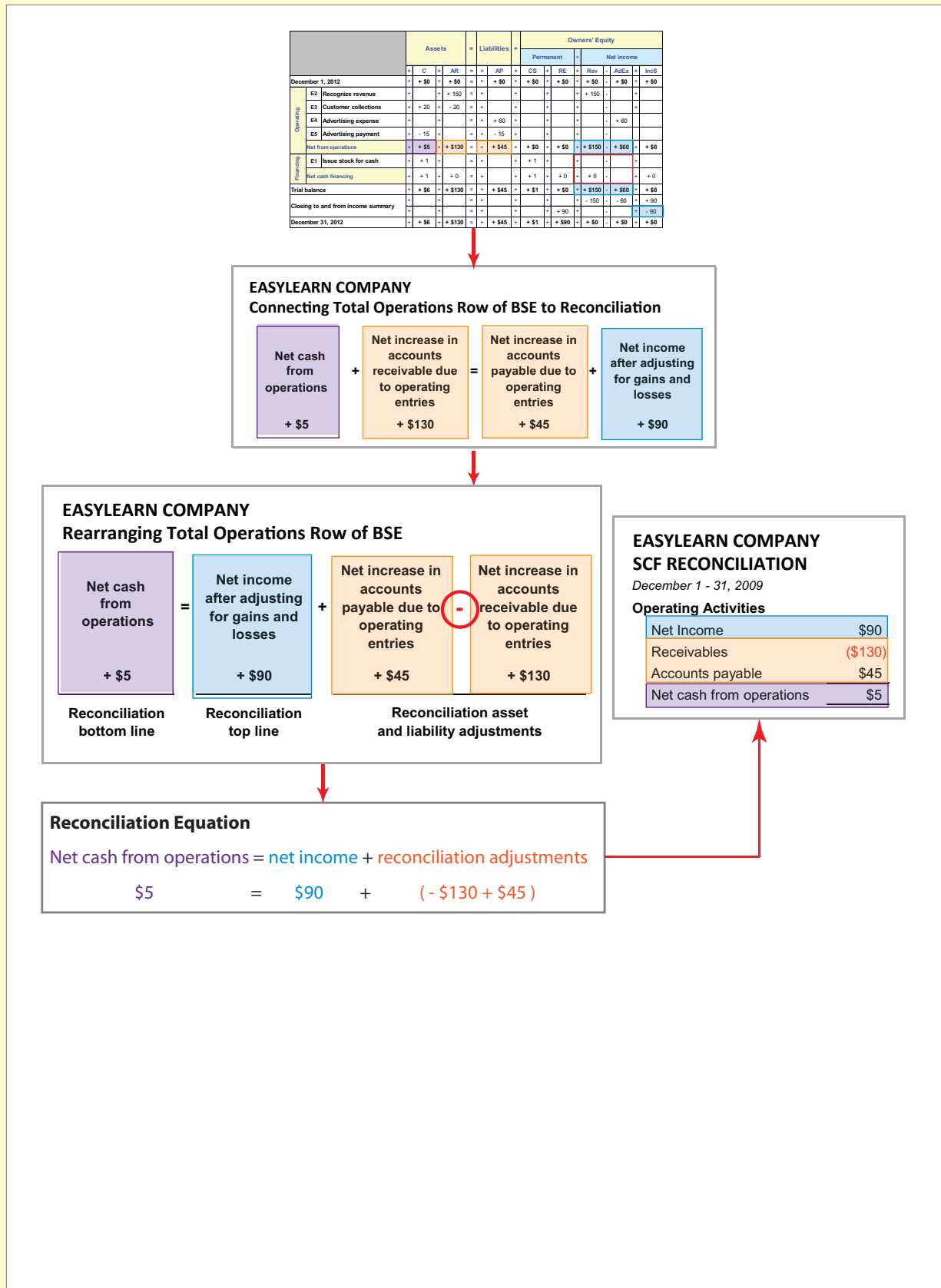
Operating Activities	Reported	Behind Reported Numbers				
		E2	E3	E4	E5	Combined
Net Income	\$90	\$150	\$0	(\$60)	\$0	\$90
Receivables	(\$130)	(\$150)	\$20			(\$130)
Accounts payable	\$45			\$60	(\$15)	\$45
Net cash from operations	\$5	\$0	\$20	\$0	(\$15)	\$5

### Insider explanation to prospective shareholder

- Explain the purpose of the reconciliation and what income measures
- Explain EasyLearn's revenue recognition policy and its implications for the receivables reconciliation adjustment
  - We recognize revenue and a receivable at the time tutoring services are rendered and collect the receivables at a later date
  - During the current reporting period, the net effect of these operating entries on receivables was a \$130 increase
  - When there is a net increase in accounts receivable, it means we recognized more revenue than we collected and thus that we recognized more income than cash from operations
  - Accordingly, the \$130 *net increase* in accounts receivable related to operating entries must be *subtracted* from the \$150 of revenue recognized in net income to reconcile it to the \$20 of customer collections in net cash from operations

**Figure 3 Reconciliation Adjustment Signs on Cash flow Statements**

This figure derives the reconciliation equation from the BSE matrix to show why asset adjustments are the opposite sign.



**Figure 4 Creating Cash Flow Statements**

This figure illustrates how to create direct and indirect cash flow statements from BSE matrix.

	Assets		=	Liabilities		Owners' Equity				
	C	AR		AP	Permanent		Net income			
					CS	RE	Rev	AdEx	IncS	
December 1, 2009	+ \$0	+ \$0	=	+ \$0	+ \$0	+ \$0	+ \$0	-	+ \$0	+ \$0
Operating	E2 Recognize revenue	+ 150	=					+ 150		
	E3 Customer collections	+ 20	=	- 20						
	E4 Advertising expense		=	+ 60					- 60	
	E5 Advertising payment	- 15	=	- 15						
	<b>Total operations</b>	<b>+ \$5</b>	<b>+ \$130</b>	<b>=</b>	<b>+ \$45</b>	<b>+ \$0</b>	<b>+ \$0</b>	<b>+ \$150</b>	<b>- \$60</b>	<b>+ \$90</b>
Financing	E1 Issue stock for cash	+ 1	=		+ 1					
	<b>Total financing</b>	<b>+ 1</b>	<b>=</b>	<b>0</b>	<b>+ 1</b>	<b>+ 0</b>	<b>+ 0</b>			<b>+ 0</b>
<b>Trial balance</b>	<b>+ \$6</b>	<b>+ \$130</b>	<b>=</b>	<b>+ \$45</b>	<b>+ \$1</b>	<b>+ \$0</b>	<b>+ \$150</b>	<b>- \$60</b>	<b>+ \$90</b>	
<b>Closing to and from income summary</b>			<b>=</b>				<b>+ 90</b>	<b>- 90</b>	<b>+ 90</b>	
December 31, 2009	+ \$6	+ \$130	=	+ \$45	+ \$1	+ \$90	+ \$0	- \$0	+ \$0	

**EASYLEARN COMPANY  
DIRECT CASH FLOW STATEMENT**

December 1 - 31, 2009

<b>Operating Activities</b>	
Sales collections	\$20
Advertising payment	(15)
<b>Net cash from operations</b>	<b>5</b>
<b>Financing Activities</b>	
Sale of common stock	1
<b>Net cash from financing</b>	<b>1</b>
<b>Change in cash</b>	<b>6</b>
<b>Beginning Cash balance</b>	<b>0</b>
<b>Ending cash balance</b>	<b>\$6</b>

**EASYLEARN COMPANY  
INDIRECT CASH FLOW STATEMENT**

December 1 - 31, 2009

<b>Operating Activities</b>	
Net Income	\$90
Receivables	(130)
Accounts payable	45
<b>Net cash from operations</b>	<b>5</b>
<b>Financing Activities</b>	
Sale of common stock	1
<b>Net cash from financing</b>	<b>1</b>
<b>Change in cash</b>	<b>6</b>
<b>Beginning Cash balance</b>	<b>0</b>
<b>Ending cash balance</b>	<b>\$6</b>

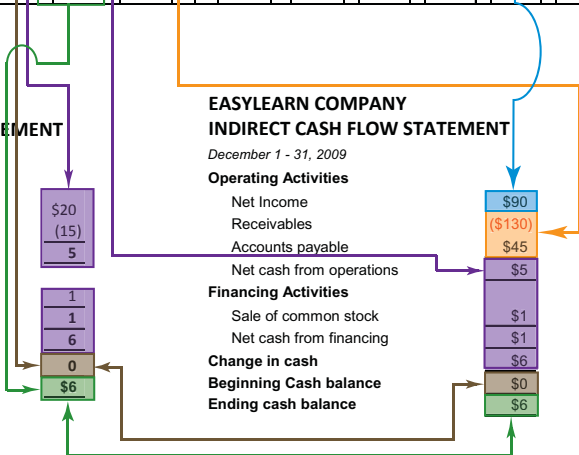
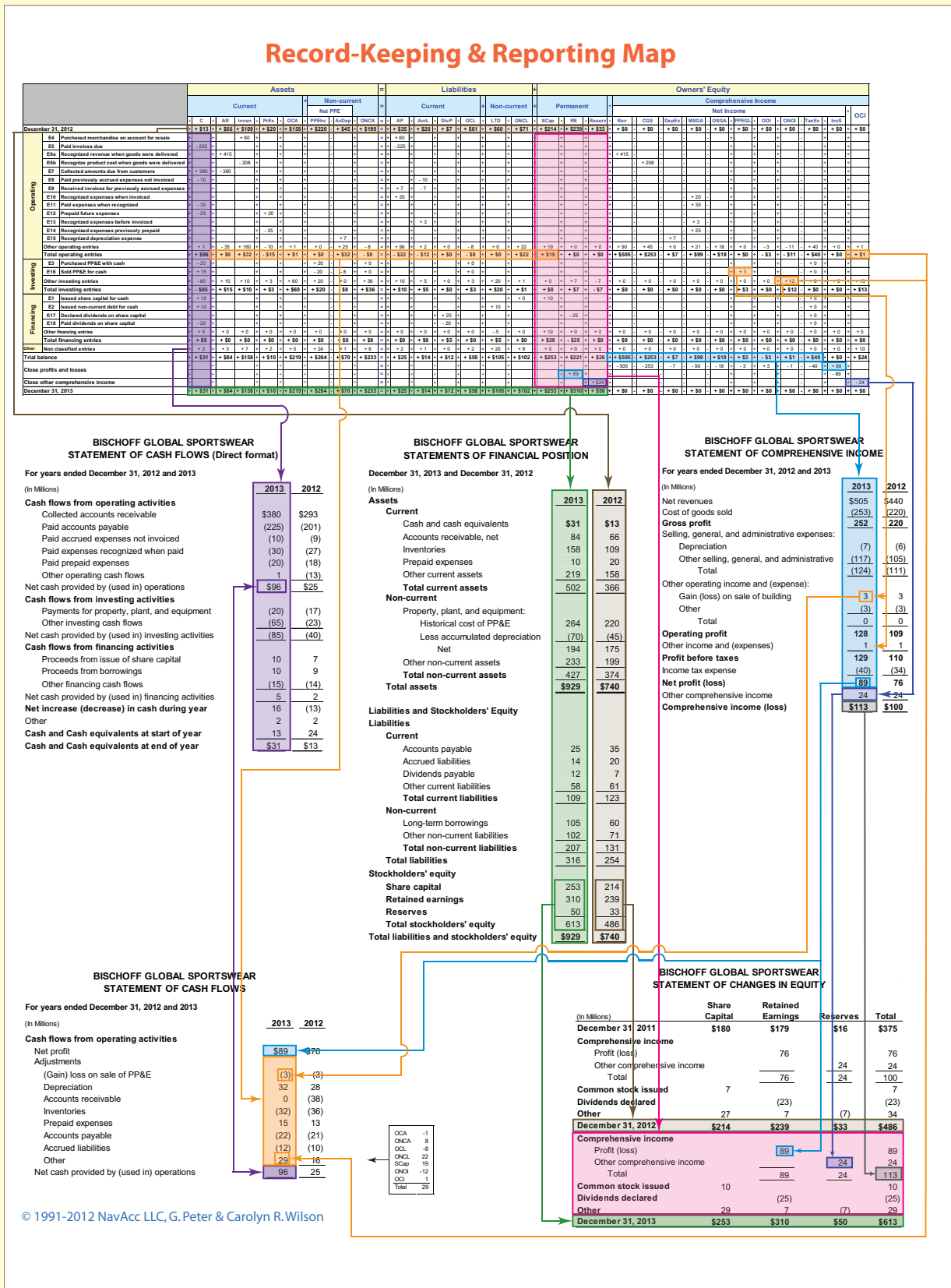


Figure 5 Record-Keeping & Reporting Map - Final Phase

This figure is the final phase of the R&R map, developed over the balance sheet, income statement and cash flow chapters.



### Figure 6 Accounting is not a spectator sport — it's game time

This figure lists Scenic route menus for additional information.

