Delivery Costs Control:
A Major Profit-Improvement Opportunity

WF&FSA members are somewhat unique among distributors in terms of the magnitude of their delivery costs. While every distributor in every line of trade makes deliveries, WF&FSA members make a lot of them. While every distributor has more small deliveries than they would like, WF&FSA members sometimes seem to have nothing but small deliveries.

The result is that delivery costs in the floral industry account for a disproportionately large percentage of total expenses. The magnitude of the expenditure has caused firms to focus on both the cost of providing delivery service and the revenue opportunity associated with charging for delivery. While there has been some success in controlling delivery expenditures, there is still a ways to go.

This white paper will briefly review three specific topics associated with delivery costs in the industry:

- **Delivery Cost Recovery–**Most firms don't have a delivery charge that covers all of the costs associated with a delivery. This section will briefly review some of the opportunities available in matching delivery revenue to delivery expense in a more positive way.
- **Delivery Charge Calculation–**In most instances firms have a reasonable estimate of their cost per delivery. However, the procedures employed in the calculations are far from uniform. In too many cases delivery costs are substantially underestimated.
- **Delivery Cost Calculation System–**The white paper will conclude by providing an Excel template that allows firms to calculate their true cost per delivery and test some "what if" assumptions about improvement.

Delivery Cost Recovery

There are three pressure points available to reduce the overall cost of delivery. These are 1) enhancing productivity/reducing costs in the delivery function, 2) increasing delivery charges made to customers and 3) increasing the size of the average delivered order. Each of these plays an important role in controlling overall delivery expense.

Productivity/Costs

The first step in any process-improvement activity is to understand how costs can be taken out of the system. The problem with lowering the cost of delivery is that

most of the obvious opportunities were capitalized upon long ago. The opportunities for cost improvement going forward are fairly modest. However, firms that can maintain a lower cost per delivery have a decided advantage in a competitive market. The fact the opportunity is modest should not stand in the way of an on-going cost review.

With regard to productivity improvements or cost reduction programs, five distinct opportunities need to be reviewed:

- **Scheduling–**Delivery scheduling software is widely available, relatively inexpensive and incredibly good for routine deliveries. Such systems tend to break down when hot shot deliveries and unscheduled deliveries are added to the delivery mix. Any firm that has not already explored this avenue is in danger of slipping far behind the cost curve.

- **Delivery-Time Analysis**–Firms such as UPS and FedEx are notorious for the rigor they bring to the delivery function. Delivery rules such as "never make a left-hand turn" have become legendary. GPS technology now allows every firm to determine the time per stop and the time between deliveries with greater precision than ever before. Even in an entirely unscheduled delivery environment, improvement opportunities exist.

- **Fuel-Cost Reduction**–The fuel performance options associated with delivery vehicles is continually expanding. There is no real need to be on the cutting edge of alternative fuel vehicles. However, it is essential to at least evaluate higher-mileage vehicles.

- **Seasonal Delivery Patterns**–Businesses with peaks and valleys in sales, such as floral distribution, automatically incur higher costs. Staffing for peak seasons increases costs, staffing for low seasons diminishes delivery performance. Using outside delivery services, retired employees looking for work a few weeks a year (using their own cars subject to local insurance regulations) and purchasing temporary delivery services from non-seasonal distributors are all options that need to be considered.

- **Workload Reduction–**Longer term, the only real solution to the delivery expense issue is to reduce the amount of work involved. Both the encouragement of walk-in transactions and imposing minimum delivery standards are critical here. Most firms sharply over-estimate the competitive difficulties associated with establishing a reasonable minimum-order program.

As important as cost control is in creating a competitive advantage, it is the least powerful of the profit tools associated with delivery. A much more powerful profit lever is to generate more revenue in the form of delivery charges to customers in order to offset the cost of delivery.

Increasing Delivery Charges

Virtually every company in the industry imposes a delivery charge to customers. Anecdotal evidence suggests that such delivery charges typically amount to about half of the actual cost of a delivery. Half is certainly better than nothing, but it is a long way from complete cost recovery. The two opportunities here are applying the delivery charge more consistently and raising the actual cost factor.

Applying Delivery Charges. Delivery charges are something of a competitive Achilles' heel. While every firm has them, almost every firm provides sales people with wide latitude to eliminate them for large customers, to eliminate them in highly competitive situations, or possibly, to just eliminate them because they feel like it.

Implementing delivery charges on more orders is a matter of discipline. One way to accomplish this is to require exception reports when delivery charges are not imposed. As long as delivery chargers are viewed as a competitive challenge, on-going review will be required.

Raising the Cost Factor. Raising stated delivery charges may be impossible. However, fuel surcharges represent a viable means of enhancing delivery charges. Most research shows that, no matter the industry, customers don't like fuel surcharges. The same research also indicates that they understand and accept the charges. It is an ideal way to add another $1.00 per delivery.

Increasing the Average Delivered Order Size

The economics of increasing the average order size are compelling. Technically, such actions do not really reduce delivery charges. They simply spread delivery costs over a larger transaction. However, their profit implication is large as the following table demonstrates.

The table examines various order sizes between $100 and $200, assuming a 40.0% gross margin on each order. It also assumes that there is a $20.00 actual delivery cost and a $10.00 delivery charge recovery fee. This results in the net delivery charge of $10.

Raising the order size from $100 to $200 is, of course, a 100.0% increase. However, the profit generated on the order increases by 133.3%. There is strong profit leverage from raising the transaction size.

Order Size	Gross Margin (40.0%)	Net Delivery Charge	GM Less Net Delivery	Delivery to Margin (%)
100.00	40.00	10.00	30.00	25.0
120.00	48.00	10.00	38.00	20.8
140.00	56.00	10.00	46.00	17.9
160.00	64.00	10.00	54.00	15.6
180.00	72.00	10.00	62.00	13.9
200.00	80.00	10.00	70.00	12.5

Customers order what they want, of course. Given that perspective many firms simply don't make a real effort to enhance the average order size. Suggestion selling needs to be an integral part of the sales process.

Delivery Charge Calculation

Calculating actual delivery costs is a complicated endeavor. Many organizations make metro deliveries which are relatively quick, as well as suburban or out-of-town deliveries which are much more expensive. In addition, it is not unusual for firms to make out-of-state runs once or twice per week. Clearly, each of these types of deliveries has a different cost structure. To top everything off, some deliveries are for one or two items while others involve an extensive array of merchandise.

In order to calculate delivery costs in a way that can actually be implemented and used for decision making, it is essential to put two parameters around the analysis process:

- **Delivery Segmentation–**Each category or type of delivery must be viewed as a unique entity. That is, metro deliveries must be considered as one type of delivery and the cost of these deliveries analyzed separately from out-of-town deliveries. Mixing and matching simply cannot be done.

- **Delivery Uniformity–**Within a specific category of deliveries it must be assumed that a delivery is a delivery is a delivery. Attempts to factor in

distance from the distribution center or the size of order are well-intentioned exercises. However, they dramatically increases the complexity of the analysis.

Once these two rules are accepted, it is a relatively easy issue to determine the total costs of making the deliveries in each segment and the number of deliveries made in that segment. Then it is simply a matter of dividing to generate a cost per delivery. The Excel template that was mentioned earlier will follow this exact approach.

It should be noted that it is not possible to start with an hourly labor cost and a the time required per delivery to determine the true cost per delivery. Ignoring employee turnover and overtime for a moment, the reality is that delivery employees work 48 to 50 weeks per year but get paid for 52 weeks. They also get paid for holidays and sick days (or personal days off). Trying to calculate delivery costs based upon an hourly rate will always underestimate delivery costs by a factor of 10% to 15%.

It is also necessary to fully load the payroll costs. Social Security, Medicare, Workers' Compensation, health insurance and retirement contributions are all very real costs. Ultimately, they must be included in the delivery cost calculation. The Excel template provides a way to estimate these quickly and easily.

On top of the labor costs, all of the expenses associated with delivery operations must be included. Depreciation, for example, may be a non-cash expense, but ultimately trucks have to be replaced. Depreciation, maintenance, gas and oil, interest on loans to purchase the delivery vehicles and/or lease payments must all be put into the equation.

Finally, to measure the true cost of delivery to the firm, any delivery revenue received must be subtracted from total delivery costs. Again, care must be taken that the revenue is for the same sub-set of deliveries as the cost analysis, such as metro only.

Delivery Cost Calculation System

As part of this project, an Excel template has been prepared to assist WF&FSA distributors in calculating their true delivery cost and understanding how changes in key delivery cost drivers will impact profitability. The system follows the same exact approach that was outlined in the previous section. The following paragraphs simply explain a few of the intricacies of the system.

Total Company Information

The system starts by requiring information on total payroll at the firm (or distribution center) level. This data will be used to approximate the fully loaded delivery payroll instead of requiring the user to make a lot of calculations about the burden that should be applied to delivery wages. Four items are required plus a total:

1.	Total Salaries, Wages, Commission and Bonuses	**$500,000**
2.	Total Payroll Taxes	**$50,000**
3.	Total Group Insurance	**$35,000**
4.	Retirement Contribution	**$15,000**
5.	Total Payroll Expense	$600,000

Delivery Area Information

Since delivery costs can vary widely according to where deliveries are made (metro area versus out of town, etc.) all of the remaining required information is for the specific category of deliveries that is being analyzed. Again, this could just be for metro locations, just for out-of-town, for all customers serviced or any other breakout desired.

The questions include the amount of sales in the delivery segment, the breakout of delivered versus walk-in sales, the number of deliveries made in the segment and some specifics as to how delivery charges to customers are determined:

6.	Net Sales in This Marketing Area Total Sales Less Return and Allowances	**$2,000,000**
7.	Gross Margin	**$800,000**
8.	Sales Mix--Percent of Total Sales	
	Delivered Sales	**75.0** %
	Walk-In, Pick-up Sales (Calculates Automatically)	25.0
	Total Sales	100.0 %
9.	Total Number of Deliveries	**15,000**
10.	Do You Charge for Deliveries (at least some of the time)? (Y,N)	**y**
11.	**Since you have delivery charges, please go to Question #11a. Watch out, it gets tricky.**	
11a.	Is the charge a flat fee per delivery? (Y,N)	**y**
11b.	You said yes, so what is the fee per delivery?	**$10.00**
11c.	Is the charge a percent of sales? (Y,N)	**n**
11d.	Since 11c is no, leave this at zero	**0.0** %

Cost Information

The cost information provided must be for the same exact delivery segment as was used for questions 6 through 11. Most of these costs should be readily identifiable. However, in some instances in may be necessary to estimate. If, for example, some drivers work both metro and out-of-two routes then their payroll costs need to be assigned accordingly:

12.	Please enter all of the following delivery expense items for the same time period as before. All items have been set to zero to start.	
12a.	All delivery wages, salaries and bonuses. (If drivers also work in the warehouse or perform some other functions, consider only time as a driver).	**$100,000**
12b.	Gas and oil for delivery vehicles	**$50,000**
12c.	Insurance for delivery vehicles	**$2,500**
12d.	Depreciation of delivery vehicles	**$8,000**
12e.	Repairs and maintenance of delivery vehicles	**$2,500**
12f.	Lease payments (or interest on loans) on delivery vehicles	**$1,000**
12f.	Any other costs of the firm's delivery fleet	**$1,000**
	Total Vehicle Costs (Calculates Automatically)	$65,000
12g.	Outside delivery costs	**$50,000**
12h.	Total delivery charges made to all customers in total	**$120,000**

Delivery Cost Overview

The following information is provided for deliveries in the selected segment:

	Total Firm	Per Delivery
Delivered Sales	$1,500,000	$100.00
Gross Margin	600,000	$40.00
Delivery Costs		
Delivery Labor Costs		
Delivery Payroll	100,000	$6.67
Fringe Benefits	20,000	$1.33
Direct Payroll	120,000	$8.00
Vehicle Expenses		
Gas and Oil	50,000	$3.33
Insurance	2,500	$0.17
Depreciation	8,000	$0.53
Repairs	2,500	$0.17
Lease/Interest	1,000	$0.07
All Other	1,000	$0.07
Total Vehicle Expenses	65,000	$4.33
Outside Delivery Services	50,000	$3.33
Total Delivery Costs	235,000	$15.67
Less: Fees Charged to Customers	120,000	$8.00
Net Cost per Delivery	$115,000	$7.67

What-If Analysis

The real benefit to using Excel, of course, is the ability to review a variety of "what if" scenarios. The template allows users to change three factors:

1. **Increase in Delivery Productivity–**Requires a percentage figure, such as 2.0%. This means that the cost per delivery is *reduced* by 2.0%. If a negative figure is used, the cost per delivery *increases*.
2. **Increase in the Average Delivery Size–**Requires a percentage figure, such as 5.0%. This means that the size of the average delivery is *increased* by 5.0%. If a negative figure is used, the average delivery size is *reduced*.
3. **Increase in the Average Delivery Charge–**Requires a dollar figure, such as $1.00. This means that the average delivery charge is *increased* by $1.00. If a negative figure is used, the average delivery charge is *reduced*.

The results of the changes are shown in the following exhibit that prints from the Excel template:

	Current Results	**2% Productivity Improvement**	**5% Increase in Average Delivery**	**$1.00 Increase in Delivery Charge**	**All Factors At the Same Time**
Delivered Sales	$1,500,000	$1,500,000	$1,575,000	$1,500,000	$1,575,000
Gross Margin	600,000	600,000	630,000	$600,000	630,000
Number of Deliveries	15,000	15,000	15,000	15,000	15,000
Cost per Delivery	15.67	15.35	15.67	15.67	15.35
Total Delivery Cost	235,000	230,300	235,000	235,000	230,300
Delivery Fees Charged	120,000	120,000	120,000	135,000	135,000
Net Delivery Cost	115,000	110,300	115,000	100,000	95,300
Contributin Margin (Gross Margin Minus Delivery Costs)	$485,000	$489,700	$515,000	$500,000	$534,700

Moving Forward

Delivery costs remain a major profit opportunity for WF&FSA members. Capitalizing on that opportunity will require a combination of detailed cost analysis and the development of specific action programs.

The materials discussed here provide at least a frame of reference for improvement. Given the magnitude of delivery costs in the industry, doing nothing should not be considered an alternative. At an absolute minimum, WF&FSA members should utilize the Excel template, or conduct their own analysis. It is essential to at least know the magnitude of both the problem and the improvement opportunity.