



KrafKote Project





Product Concept - Post Print Linerboard

- **Designed to attack the waxed produce corrugated box market**
- **Economic alternative to**
 - ◆ **Titanium white- top linerboard**
- **Economic and performance alternative to**
 - ◆ **Off-line coated brown linerboard**
 - ◆ **On-line coated brown linerboard**





Market Situation

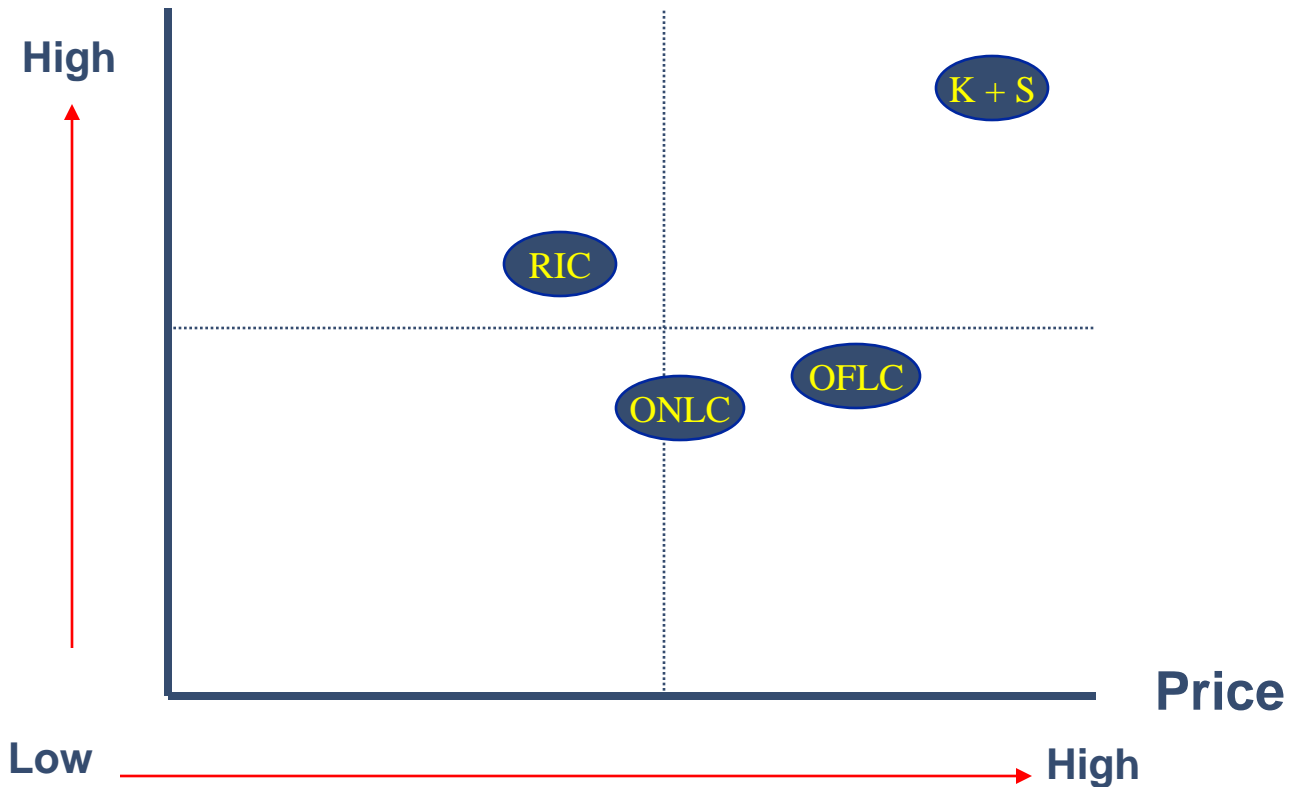
- **The waxed produce corrugated is estimated to be 200,000 tons/year**
- **The market is segmented by printing requirements in high, medium and low brightness segments**
- **Riverwood can only compete in the segments with medium and lower brightness (less than 80)**
- **Opportunity market is estimated to be about 2/3 of total market**





Relative Competitive Position

Performance



K+S = Kruger and Simpson
ONLC = On line coating
OFLC = Off line coating





Competitive Position versus Titanium White Top Linerboard

Advantages	Disadvantages
Economic Alternative	More difficult to glue and print
Similar performance in medium and low brightness segments	
Freight	Switching cost





Competitive Position versus on-line Coated Linerboard

Advantages	Disadvantages
Economic Alternative	More difficult to glue and print
Improve printing surface	Two inventories
Increased plant efficiencies (less waste and downtime, increased machine speed)	Switching cost





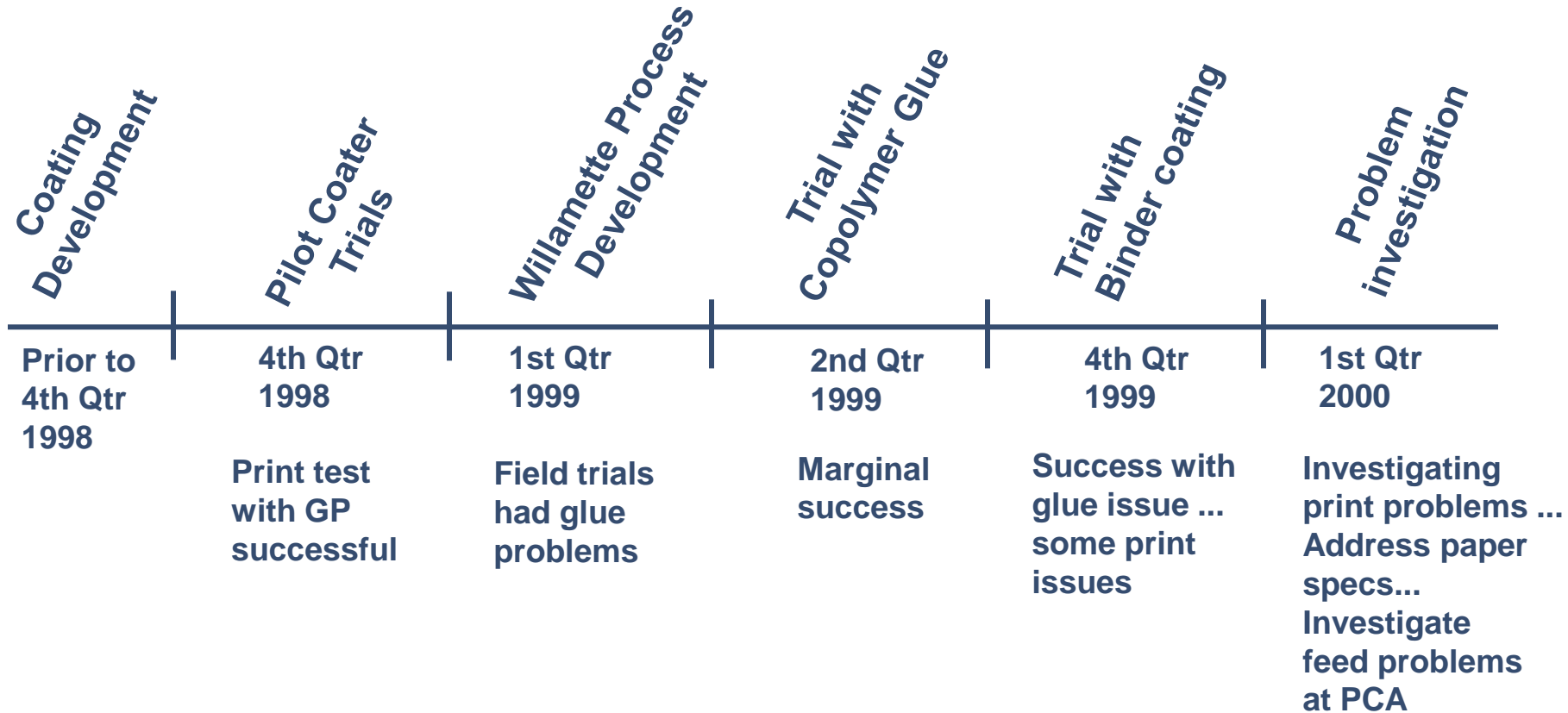
Competitive Position versus off-line Coated Linerboard

Advantages	Disadvantages
Economic Alternative	More difficult to glue and print
Improve printing surface	Switching cost
Eliminate outside coater	





Timeline





Post Print Linerboard Customers

- **Four current customers**
- **Successful trials completed at three plants**
- **Trial in progress at seven plants**
- **Identified additional 24 potential customers**





Fitness For Use

- **Accepted by four customers**
- **Meeting customer expectations**
 - ◆ **Convertible in box plants**
 - ◆ **+60 after wax brightness**
- **Initial glue problems have been resolved**
 - ◆ **New coating formulation**
 - ◆ **Switch box manufacturers to a new glue**
- **New coating resulted in some printing issues that are under investigation**





Switching Cost

- **Learning curve**
 - ◆ New set of converting specifications
 - ◆ Adjust the converting process
- **Increase inventories**
- **New glue**
 - ◆ More expensive
 - ◆ Increase inventories
 - ◆ Change over costs
- **Box manufacturers are resistant to change**
- **Break existent relationships**
- **Riverwood has to overcome its bad reputation**
 - ◆ Not a reliable supplier that abandons new products





Production Planning Analysis and Logistics

- According to 2000 standard cost
 - Provided trim, and machine availability
 - Macon is the most profitable option to manufacture 42 #
 - 57 # does not have a dramatic cost difference between mills
- From a logistics side
 - Macon has freight advantage for Customers in Florida
 - West Monroe has a freight advantage for customers in California, Mexico, Texas
 - South and Central American customers can be served from either mill
- Production decisions should be made based on a criteria that takes into consideration COGS, freight, trim and machine availability to maximize Riverwood profits

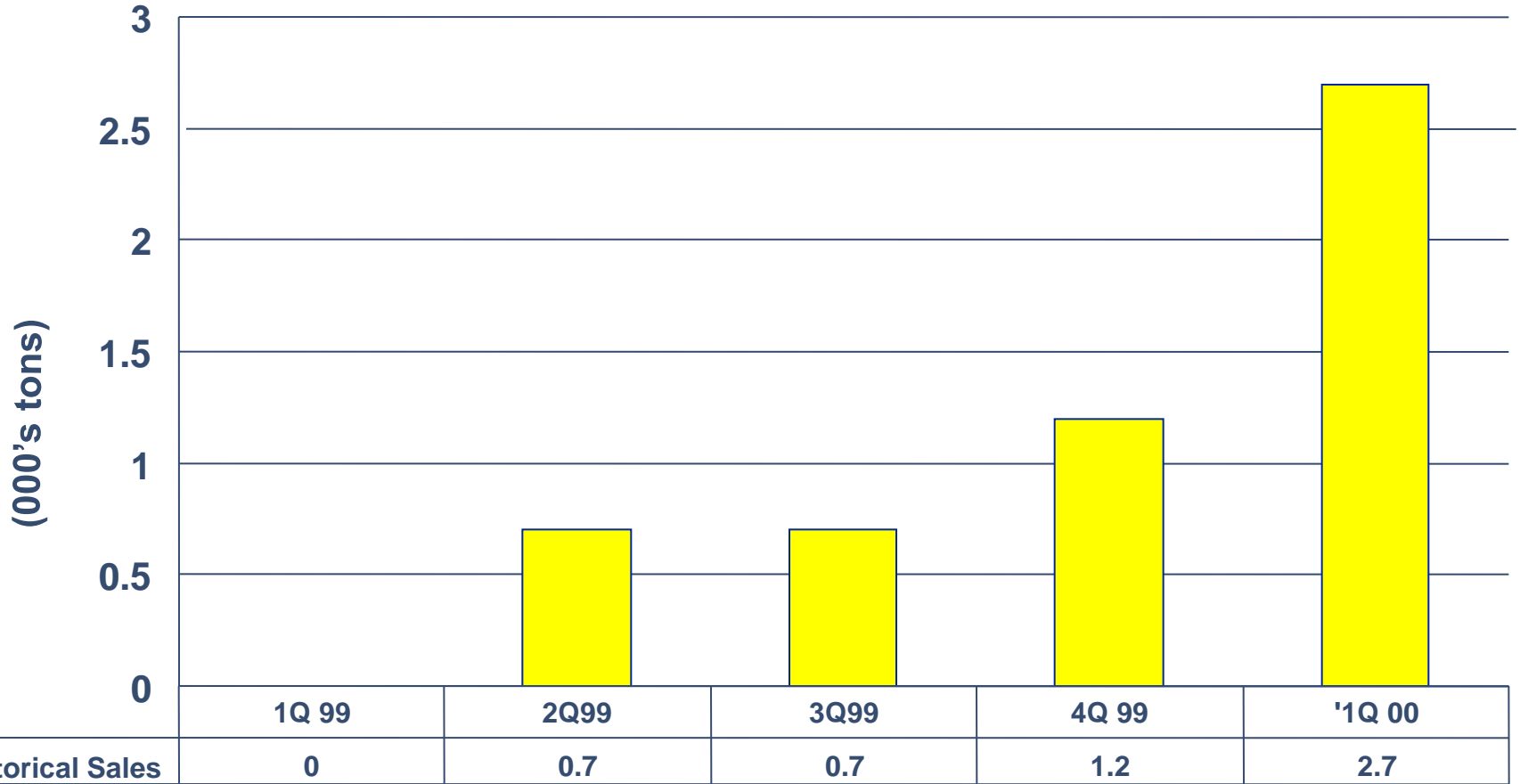
**Margin (\$/ton) before freight,
Cash Discounts and Complaints**

	Macon	WM
42 #	64	28
57#	95	90



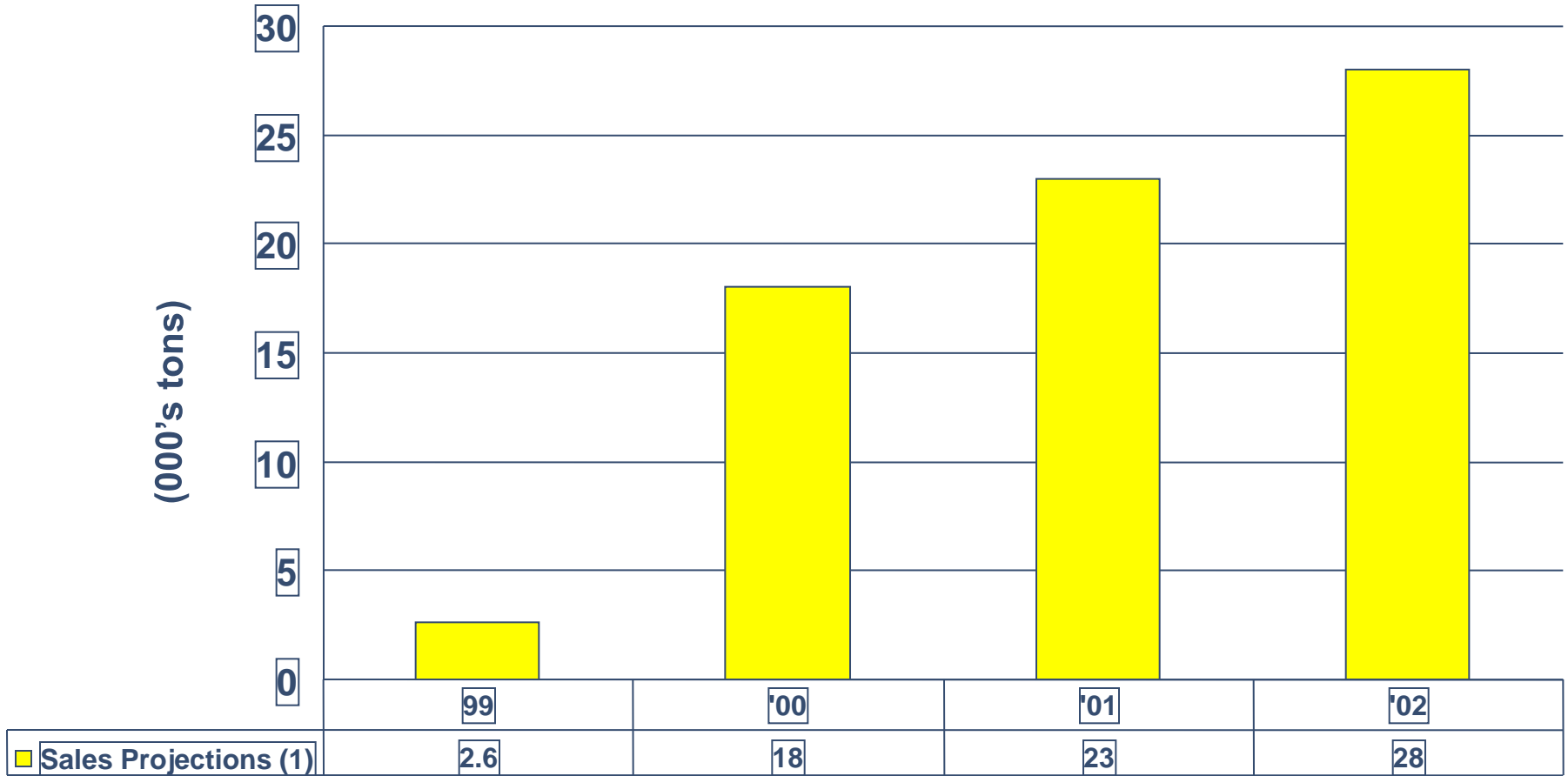


Post Print Linerboard Historical Sales





Post Print Linerboard Sales Projections

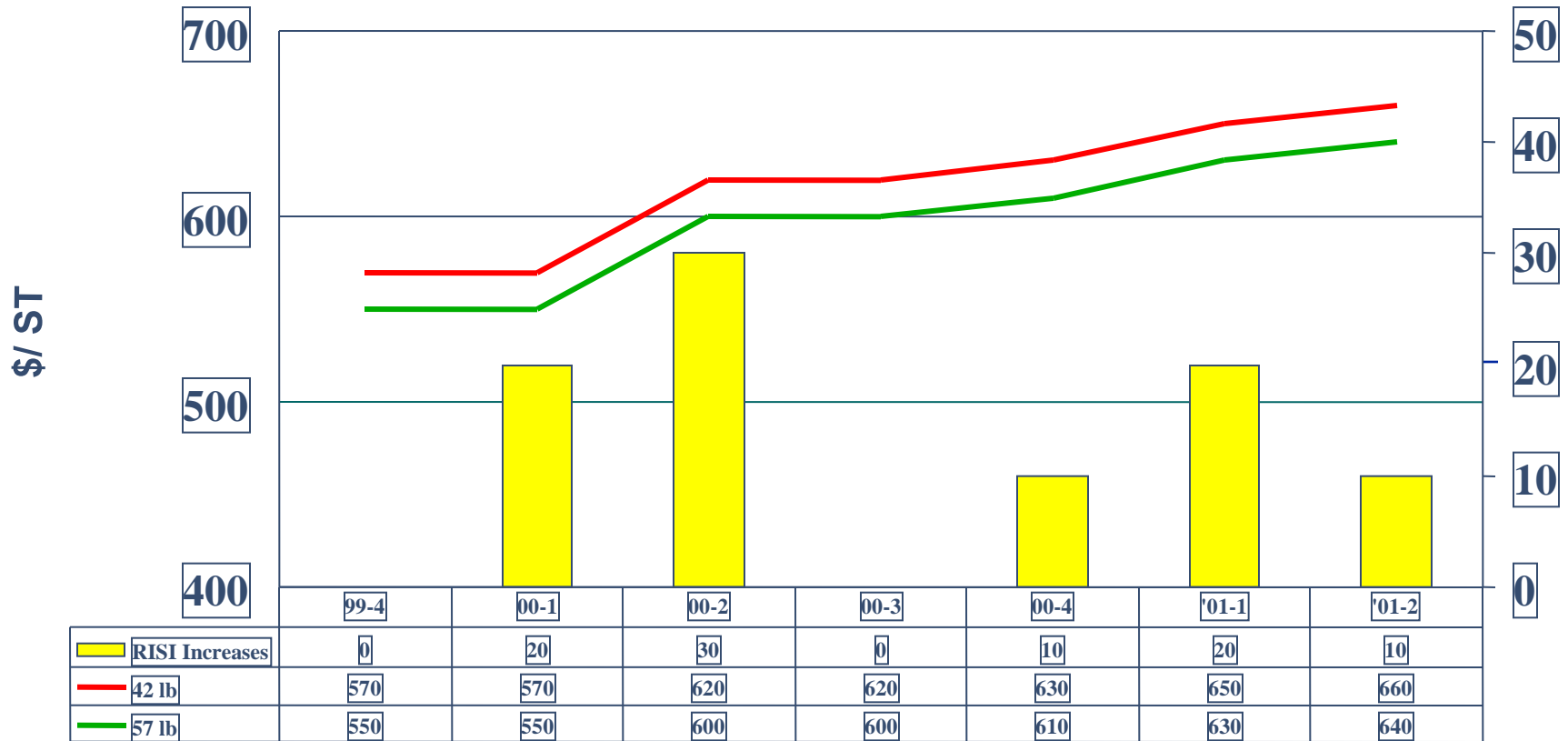


Source: (1) Based on a 25% success rate attacking 34 potential new customers with an average consumption of 200 tons/month. Developmental process takes at least 8 months





RISI Projected Price Increases



Source: RISI Paper Packaging Monitor, March 2000





Next Steps

- **Close the information gaps to calculate the opportunity market for this product**
- **Allocate technical service resources to support the growth of this product**
- **Develop the Marketing Plan**
- **Resolve printing issues**
- **Cost/benefits analysis of developing a hot melt glue coating to attack the bleach linerboard market**
- **Review standard cost**
 - ◆ **2000 versus 1999 is up \$60/ton for 42# in West Monroe**
- **Freight analysis to identify the most profitable customers to attack**

