Green / Alternative Key Card Options

- **Recycled PVC**: This is our preferred / recommended solution in this arena. This basically uses the waste from the overall process, as well as defective product to create a recycled material (similar to bottles/paper). We either offer, or have partnerships to produce any of the noted alternatives, so we hope that demonstrates our lack of bias. We like this solution, as it has a low carbon footprint, reproduces colors the best (other than white in some cases) and most mirrors the current process. All of these elements allow the lowest price typically, which is another tradeoff to consider.

- **Bio-PVC**: While the card itself is biodegradable, the magnetic stripe and the laminate aren't, so it isn't helping as much as would be expected. The industry is working on a solution to this, but right now no one has a solution – to our knowledge – that is truly biodegradable in the sense of it not harming the environment if put in a landfill. Also, we have seen issues with the lamination holding on this material – a small issue, but would affect yields and reduce the longevity of the product. Need to really look at the overall carbon footprint and right now recyclyed PVC's is actually lower. Again, this is sort of the holy grail for the industry, but no one is there yet.

- **Corn**: This is a solid choice in terms of the overall properties, but one reason we haven't promoted it more extensively is the price volatility of the product. Ethanol is subsidized a bit by the government and is being used as an alternate fuel source, meaning demand will only continue to increase, but supply is somewhat limited right now. We have heard about some supply issues that are – pardon the pun – cropping up and supply is certainly a concern, especially worldwide. I bring this up only because the supplier may have a hard time holding price so that you may be looking at a change from this in the future. Also, while "green" there is still energy expended to convert to a form usable by this industry (meaning if the goal is to reduce the overall environmental impact, there is more than you would expect on the surface). There is also the issue of the magnetic stripe. Finally, there is a special treatment necessary to recycle it, so it isn't quite as smooth a process.

- **Paperboard**: Some of our testing showed that when these end up in someone's pocket and bend, the magnetic stripe can curl and thus not work as well in the lock system. We have also heard feedback that these don't always work in every lock system which might be a concern when running a program across many properties with varied lock systems. The fibers from the paper can also get into the lock systems and slowly cause issues over time. Also, they can be perceived as on the "cheap" side as compared to the other noted choices. Finally, this is the hardest method to achieve a consistently high quality product. Bottom line, is this alternative could end up causing a customer service headache. Obviously the big advantage is that it is perceived as highly "green".

- **Teslin**: These are mainly used mainly in for key tags. Good for variable information type of uses – as the bar code is beneath the laminate. They have a slightly different feel and are typically 10-15% more costly because the market is smaller. We have heard comments about the feel of it being cheap.