Solar-Powered Electronic Multi-Space Pay & Display Parking Meters

Why?

- **Pay** and **Display** Stations would increase the payment options for customers, enhance revenues, reduce maintenance costs and improve the on-street or in-lot aethetics. "Your meter forests make the lot ugly."

- The financial **justification** for **Pay** and **Display** was based, in part, on the operational efficiencies that can be gained.

- Recognize parking as valuable commodity

Operational Advantages

- Solar powered by day
- Rechargeable battery by night
- Receipts are made from recycled paper
- Communicate problems to Meter Technician via cell phone text message
- All activity and collections monitored via back office website
- Reduced maintenance load
- All users pay for own time

… and timing:

- 83 Current Traditional parking meters are beyond their expected life span.
  - Replacement cost for traditional single-space system: $42,000
- Ad Hoc Parking Facility Finance Committee recommended implementation to pay for future garage without use of general funds.
  - Cost to institute Pay & Display city-wide: $403,000
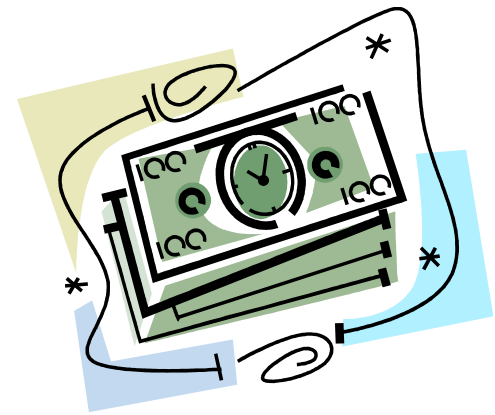
Project Costs

|	Pay & Display Meters	Single-Space Meters
Total needed to outfit the City	40	558
Current on-street inventory	0	83
Cost per meter installed	$8,000	$550.00
Spaces per Meter	10	1
Total project cost	$403,000	$306,900
Phase I cost for 9	**$78,000**	**$45,650**

	Pay & Display Meters	Traditional Meters
Phase One	9	83
Current on-street inventory	0	83
Cost per meter installed	8,000	~$550
Total project cost	$80,000	$45,650
Expenditures to date	$0	$0
Estimated remaining project costs	$323,000	$310,800
Estimated Effect on Annual Revenue:		
annual meter revenue	n/a	$34,067
Expected revenue increase	37%	0% = $0
Expected annual revenue	$90,750	n/a
Estimated credit card usage	60%	n/a
Annual credit card revenue	$54,450	n/a
Credit card (c/c) charges	15%	n/a
Estimated annual c/c costs	$8,168	n/a
Net meter revenue	$82,582	**$34,067**
Net meter revenue increase	$48,515	$0
Expenditures-maint & fees	5,520	$
Current Annual violations revenue	$135,109	$135,109
Net Annual Change	**$77,062**	**$0**

Miscellaneous Facts:

	Pay & Display Meters	Traditional Meters
replacement	No	Twice per year ~1,700 9V batteries
Back office processing	Yes	No
Accurate coin collections	Yes	No
Proof of purchase	Yes	No
Receipt material	Recycled paper	None
Trouble reporting	Text message, website	Customer or PEO phone call
Power source	Solar, rechargeable battery	9 volt battery
Maintenance time (Note 3)	2 hours per week	8 hours per week
Parking spaces per meter	20 w/max. of 22	1
Return to car after payment	Yes	No
Average credit card revenue	40% of total	
Average credit card transaction	$1.26	
Average coin transaction	$.80	

Pay & Display Facts

- Pay & Display meter systems are utilized in more than 3,000 cities across 40 countries

- Aspen, CO, July 1995 – first U.S. city

- Used in most major U.S. cities including NYC, Chicago, Seattle, Boston, D.C., Miami

- Manchester, NH instituted their system city-wide in December 2006, Portsmouth a year later.
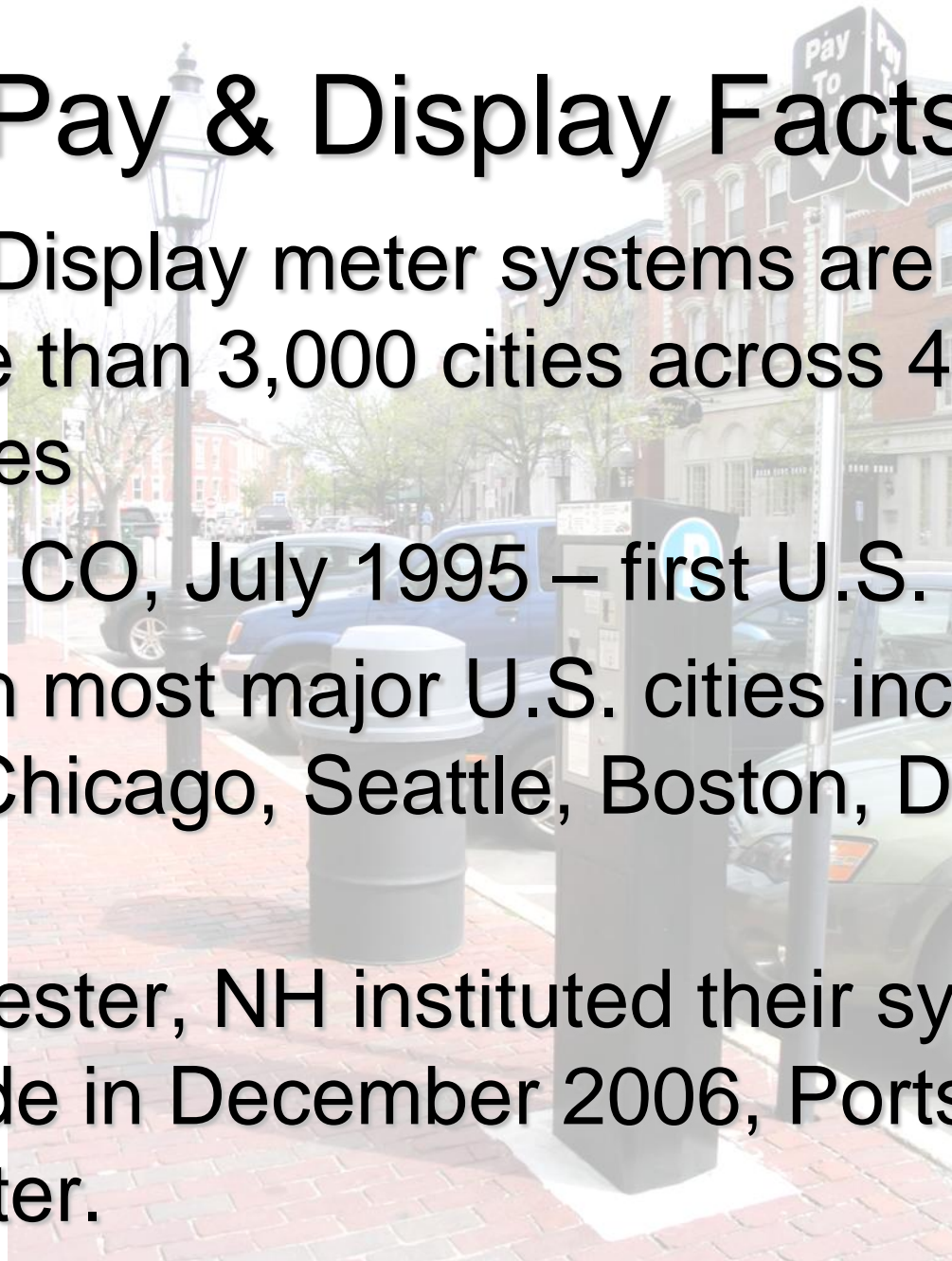
PROS

- Credit card option
- Proof of purchase
- Free streetscape of meter poles
- More environmentally friendly
- Less steps and wait time than an ATM
- People want to pay if given the opportunity

CONS

- Increased walk to return receipt to dashboard
- Potential for waiting to pay
- Learning curve
- Enforcement learning curve, but no increase in PEO's

Added Benefits

- Better internal accounting controls

- Reduced meter maintenance load

- More versatile staffing options

- Less obstacles for sidewalk snow removal

- Recognizes parking as a valued commodity

Common Concerns

- I have to walk back to my car.
- I had to wait in line in the rain.
- Inconvenient to carry my kids and their stroller through the snow and climb over snow banks to get to the meter.
- They don't take dollar bills.
- Credit card security

Solutions To Address Pay & Display Concerns

- In-Dash Meters may be offered/purchased (program not available yet)

- Accessible Parking for retail customers

- Retail parking programs/permits still doable and viable

- PCI Compliance

PCI Compliance

- The Payment Card Industry Data Security Standard (PCI DSS) is a set of requirements designed to ensure that **ALL** companies that **process, store** or **transmit** credit card information maintain a secure environment. http://www.pcicomplianceguide.org

- Compliance Levels 1 through 4, Level 1 being the highest (6M transactions/yr)