Contactless Initiative
Radio Frequency Enabled ID Cards
Business Services * Division of Public Safety

April 10, 2014
An alternative to a magnetic stripe, contactless cards use a microchip and antenna to communicate wirelessly with a compatible reader.

It is a form of near-field communication that requires no-touch (or near-touch) radio frequency signals.

Data encryption, high memory capacity, and two-way communication between chip and reader distinguish contactless technologies from magnetic stripes as well as proximity cards.
Comparative Advantages of Contactless relative to Magnetic Stripe

- **Availability** of cards and equipment is relatively limited which reduces counterfeit potential.

- **Obscurity** of the encoding process and algorithms inhibits readability and duplication.

- **Cryptography** of the actual data on the card protects sensitive information.

* Adopted from “Contactless Technology for Campus ID Systems;” Blackboard Transact Inc. 2009.
Enhance security, increase convenience and enable future interoperability for access, identity and card-based transactions

**Implications for:**

- Reducing risk of invalid credentials
- Administering privileges more efficiently and effectively
- Addressing costs and challenges of physical keys
- Standardizing card technologies across campus
- Processing speed in high-volume or automated settings
- Integrating with outside entities (e.g. regional transit)
- Preparing for next-generation technology landscape
University Wide Opportunities

Potential Service Opportunities

- Efficient Time and Attendance (Kronos)
- Outside areas secured access (parking lots, stadium, etc.)
- Event Ticketing/Box Office
- Library
- Printing
- Point-of-Service Transactions
- Banking collaboration (PIN-Based Debit/Credit)
- Regional Transit partnerships
Card Reader Replacement Plan

- New readers have dual technology – mag stripe and Contactless reader
- DPS cost match with each school and center
- All card readers will be replaced by December 2014
Redesigned Security Technology Integrator Bid Process
Operation Building Safe
Operation Building Safe

• Securing perimeter access points for all Penn buildings with electronic access control or manual locks.
• Accessible to entire Penn community during business hours.
• Identifying one or two locations for visitors to enter, staffed by a concierge or security officer.
• University approved signage at all secured doors.
Benefits

• Reduce opportunity for assaults and crime in buildings.
• Enhanced emergency response to active shooter.
• Reduction of crime stats in the annual federal Clery report.
• Provide a welcoming environment for students, staff, faculty, alumni and visitors.
Card Reader Signage: College Hall

For visitor and guest access, please check-in with Security at College Hall North Entrance, 8:00am-6:00pm Monday-Friday

East Entrance Intercom
Deliveries: 8:00am-5:30pm Monday-Friday
215-573-9465

SMOKING PROHIBITED
No smoking allowed within 20 feet of the entrance to this facility.

TRESPASSING OR SOLICITING PROHIBITED
Only students, faculty, staff or alumni of the University of Pennsylvania or other persons having specific business herein, may enter this building. Violators are subject to arrest for Criminal Trespass.

DELIVERIES: Use East Entrance Intercom
8:00am-5:30pm Monday-Friday
215-573-9465
Public Safety 215-573-3333
Meyerson Exterior with Virtual Concierge Equipment
Operation Building Safe