ECO-AMBASSADORS
SESSION #2

Grafton Campus
February 6, 2014
From last week...

- How did your office introduction go?
Today’s Agenda

- Transportation
- Water
- Waste & Recycling
- Behavior Change
Transportation
Transportation Facts

• Americans spend **4.2 billion hours** stuck in traffic each year

• On average, Americans spend nearly **20% of their household budgets** on transportation

• Transportation is responsible for **28% of greenhouse gas emissions** in the US

• Between 1995 and 2011, public transportation ridership **increased by 34%**

• In 2011, Americans took **10.4 billion trips** on public transportation
Amount of space needed to transport the same number of passengers by...

Car  Bus  Bicycle
How do Grafton employees get to work?

- Drive Alone: 97.3%
- Carpool: 0.6%
- Commuter Rail/Regional Train: 0.6%
- Bicycle: 0.4%
- Walk: 1.1%
How do Grafton employees get between campuses?

Between Grafton & Medford

70% Personal vehicle (Drive-alone)
16% Public transit
13% Personal vehicle (Carpool)
Where do Grafton employees live?
App Showcase

Where's the T? New apps built by independent developers let you know where your bus or train is and when it will arrive. Check them out below!

Real Time Apps

MBTA mTicket
Buy a ticket anywhere, anytime, in seconds. The Official MBTA mTicket App is like a ticket office in your pocket. The MBTA mTicket app is now available for all.

See Say App
If you see something say something for smart phones
Using this app, riders can send the MBTA Transit Police pictures, text messages, and locations of unattended.

Transit - Boston
Find the nearest bus, train, subway or ferry stations with scheduled stops and view upcoming departures with just two quick taps.

App Disclaimer
These apps are not made by MBTA, and MBTA does not sell or license the apps. They are written by third parties unless otherwise noted. MBTA shall not be held responsible for the content of third party websites or any issue arising from the use of third party applications. MBTA neither endorses any third party products listed here nor makes any guarantees or representations as to accuracy or reliability. Proceed with care and understand any usage charges that may apply to you. MBTA reserves the right to remove/add applications listings without notice.

Are you a Developer?
Check out the MassDOT Developers page here to gain access to our data.

Want to be included on this page?
Please send a listing to developer@mbta.com with the App Title, Developer Name, Platform, and an image that is 150 x 225 pixels.

MassDOT Developers page
Introducing MBTA mTicket for Commuter Rail

Review Details

From: Anderson/Woburn

To: North Station

Ticket: 1 x Round Trip $12.00

Pass will be delivered digitally to you.

Pay
Emergency Ride Home

- Eligibility: Use a sustainable mode of transportation to travel to work 2+ times/week
- Taxi or rental car reimbursement in event of unexpected personal illness/emergency, unexpected family illness/emergency, carpool driver emergency
- 4 trips/year
• Earn rewards by taking green trips
• Find carpool partners
Communication & Collaboration

Conferencing Tools

Desktop Video Conferencing (Jabber Video)
Desktop video conferencing allows individuals at multiple locations to interact or share applications via simultaneous video and audio transmissions.

Telephone Conferencing
Telephone conferencing (Conference Bridge) provides the ability to connect geographically dispersed meeting participants (6-150) on a single phone call.

Video Conferencing Rooms
Technology Services maintains conference room format video conferencing capability on all three campuses. Currently these units are available for meetings, distance learning, and education projects.

Web Conferencing (Adobe Connect)
A web video conference uses a combination of video and audio telephony technologies to allow two or more users (or locations) to connect, meet, and collaborate via the Internet.
Ideas for your office

• Walk, bike, carpool, use public transportation when possible (to work, to events, etc.)

• Facilitate carpooling to meetings & events

• Share information with others

• Encourage office videoconferencing

• Take the stairs for exercise

• Start an office challenge
Water
WHERE IS ALL THE WATER?

SALTWATER DOMINATES EARTH'S SUPPLY:

97.5% SALTWATER

2.5% FRESHWATER

MOST FRESHWATER IS UNATTAINABLE:

70% IS FROZEN IN POLAR ICECAPS

30% LIES UNDERGROUND (most of which is too expensive to tap into and filter)

LESS THAN 1% of the world's freshwater is available for human consumption

Source: http://awesome.good.is.s3.amazonaws.com/transparency/web/1106/clean-water/flat.html
780 MILLION PEOPLE LACK ACCESS TO CLEAN WATER

THAT'S MORE THAN 2½ TIMES THE UNITED STATES POPULATION

Average Water Use Per Person Per Day

- U.S.
- Australia
- Italy
- Japan
- Mexico
- Spain
- Norway
- France
- Austria
- Denmark
- Germany
- Brazil
- Peru
- Philippines
- UK
- India
- China
- Bangladesh
- Kenya
- Ghana
- Nigeria
- Burkina Faso
- Niger
- Angola
- Cambodia
- Ethiopia
- Haiti
- Rwanda
- Uganda
- Mozambique

Litres


65 Olympic-size swimming pools
How many gallons of water does it take to make...

- Coffee: 35 – 53 Gallons
- Burger: 4,000 – 18,000 Gallons
- Car: 41,000 Gallons
- Water bottle: 1.85 Gallons
Typical office water use

Source: http://www.epa.gov/oaintrnt/water/lab_vs_office.htm
Typical lab water use

- Cooling Tower Make-up (42%)
- Laboratory Processes 25%
- Sanitary (12%)
- Single Pass Cooling Water (5%)
- Irrigation (4%)
- Sterilizer (3%)
- Boiler Feed (2%)
- Reverse Osmosis Reject (2%)
- Misc. HVAC/ Mechanical Room (5%)

Source: http://www.epa.gov/oaintrnt/water/lab_vs_office.htm
Where does Tufts’ water come from?
Water Consumption by Campus

Gallons x 1,000,000

Fiscal Year

2006 2007 2008 2009 2010 2011 2012

Grafton
Boston
Medford
Water Reduction Projects at Tufts

- Low flow toilets and urinals
- Dual flush toilets
- Faucet flow restrictors
- Metered faucets
The FACTS about BOTTLED WATER

$0.0015 / gal  $10.00 / gal

The price of bottled water is up to 10,000 times the cost of tap water

Annually, Americans consume 8.6 billion gallons of bottled water
The facts about bottled water

40% of all bottled water is taken from municipal water sources (a.k.a. tap water)

22% of tested bottled water brands contained chemical contaminants at levels above strict state health limits

Source: http://www.onlineeducation.net/bottled_water
The FACTS about BOTTLED WATER

17 Million barrels of oil are used in the production of water bottles yearly...

...enough to fuel 1 Million cars for a year
What can you do in your office?

- Model sustainable water habits for your colleagues (e.g., turn off faucet, use re-usable water bottle)
- Have a water survey for your office
- Run only full dishwasher loads
- Report leaks to Facilities –
  - Fill out an online service request https://fsrequest.tufts.edu/WebMaint/
  - Call (508) 839-7921 with emergencies
Some final thoughts

- Share the results of the Green Office Survey with a supervisor
- Educate your colleagues
- Start an office (or building, or floor) green team
- Get to know your fellow Eco-Ambassadors
- Don’t forget OOS!
What does an Eco-Ambassador do?

1. Act as a point of contact and resource
2. Model sustainable behaviors
3. Implement office sustainability initiatives and foster behavior change
Looking ahead

Assignments:

- Create draft social marketing plan
  - Due February 28

- Meeting with Supervisor or existing Eco-Ambassador team
Thanks for participating!

Tufts gets green

http://sustainability.tufts.edu