Perceptive Parking:
A Physical and Regulatory Investigation of Parking in Williamstown, Massachusetts
Land Acknowledgement

We respectfully acknowledge that Williamstown stands on the ancestral homelands of the Stockbridge-Munsee Mohicans, who are the Indigenous peoples of the region now called Williamstown.

Following tremendous hardship after being forced from their valued homelands, they continued as a sovereign Tribal Nation in Wisconsin, which is where they reside today. We pay honor and respect to their ancestors past and present as we commit to building a more inclusive and equitable space for all.
Introductions!!!

Ben - ‘25
- Environmental Studies and Political Economy
- Lake Oswego, OR

Henry - ‘25
- Economics and Environmental Studies
- New York City, New York

Sophia - ‘24
- Environmental Studies and Biology
- San Francisco, CA
Why care about parking?

- Parking is valuable in Williamstown
  - Tourism
  - Net importer of labor

- Parking spots have drawbacks
  - Development costs
  - Environmental issues
  - Aesthetics
  - Opportunity costs
A characteristic of Williamstown parking

• Spiky demand!
  ○ Big events happen a few times throughout the year

• Problems with building for the peaks
  ○ Oversupply, most of the time
  ○ Costly

• Instead...
  ○ Build for average demand, use shared space for peaks
Project Goals

• Take a snapshot of parking infrastructure, parking use, and parking bylaws in Williamstown

• Provide recommendations to optimize current infrastructure and integrate best practices into regulations moving forward
Methods

- Literature Review
- Regulatory Audit
- Physical Audit
- Stakeholder Interviews
Mandatory minimums are a nation wide phenomenon!

99% of all parking in America is free, so 87% of people drive on every trip they take (Shoup 2005)

“Paved in North Adams: Parking Utilization and Development Solutions” - ENVI 402 prior class project
Regulatory Audit

- Parking is intensely regulated in Williamstown
  - All developments must come before the planning board to discuss their parking plan
  - No shared parking

- Bylaws require specific number of spots for every kind of development
  - No real science behind these numbers
  - Lots of unlisted uses
Regulatory Audit - This is Expensive!

- **Example**: Building a Stop & Shop

- 1 parking spot per 250 sq ft of retail space
- Parking spot is 300 sq ft, so a ratio of 1:1.2
- 60,000 sq ft Stop & Shop = 240 spots, 72,000 square feet of asphalt at least, costing $180,000 to $504,000 *excluding* real estate
  - Conservative estimate - Jamie estimated $10-15k per spot which would translate to 2.4 -3.6 million

- More than doubles the footprint of the development!
- Effectively prohibits developments due to cost of real estate and paving

- Leaves parking development entirely unresponsive to supply
Physical Audit - An Overview

• What
  ○ Counting all the non-residential parking spots and cars in Williamstown GR

• Why GR
  ○ Denser development
  ○ Many intersecting interests
  ○ Saved time during the audit

• Why include the college
  ○ One-way spillover between the college and town parking

Map of Williamstown General Residence zoning region (Yellow) and Williams College (Purple) borders.
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Physical Audit - An Overview

- Audit #1
  - Saturday, October 28th
  - All of GR

- Audit #2
  - Wednesday, November 15th
  - Focused on key locations

- Data collected
  - Student, faculty, or ‘other’ cars
Parking Physical Audit Take Aways

5,571 spots vs 2,049 cars parked

During the first audit, only 36.8% of parking spots were occupied

Optimal utilization rate: 75-85%

Simultaneously, some areas nearly full

Management issue — breaking down the data further can provide insight into possible solutions
Figure 5. Histogram showing the distribution of number of parking spots per location in the Williamstown General Residence.
Usage Rates of Parking Lots

- Categories were developed based on prior reports on parking in North Adams
  - 45.9% --> less than 25% full
  - 21.9% --> less than 10% full

*Figure 6. Parking utilization at the time of the Saturday parking audit. Severely Underutilized = less than 55% full, Underutilized = 55-70% full, Optimally utilized = 70-85% full, Overutilized = 85-100% full.*
The Largest Lots Tended to Have Low Utilization
Makeup of parking users changes based on the day
Central, public spots have high utilization
Student parking is under-used

At the time of the first audit, 42% of student cars were parked outside of their assigned lot.
Stetson Ct over Homecoming weekend
Parking Audit - Key Example

- Example of a business building out surplus parking to follow bylaws

- 12000 sq ft building, 30000 sq ft of parking

- 40 Parking Spots with a 13% occupancy rate (5 cars)
Interviews

**Williamstown**
Michael Ziemba, Williamstown Police Chief
Matthew Noyes, Groundskeeper at The Clark

**Williams College**
Doug Schlaefer, Planning Design and Construction
Mark Florczyk, Safety Systems Coordinator
Nancy Macauley, Campus Safety and Security Officer
Darel Paul, Professor
Sara LaLumia, Professor
Kerry Downey, Professor
Chan Lee, Student
Scott Henderson, Project Manager for WCMA Project
Jamie Art, General Counsel for Williams College

**External**
Henry Grabar, Author of Paved Paradise
Alex Taft, Senior Planner; Hanover, NH
Ed Kinkade, Vice President of Sales, Northeast; Flowbird
Solutions: 1.1 - Eliminate Parking Minimums

Williamstown would not be the first!
- Hartford, CT (2017)
- Dover, NH (2018)
- Hudson, NY (2019)
- Burlington, VT (2023)

- Preserving maximums would ensure businesses don’t overbuild

Oregon and California entirely prohibited parking requirements near high-frequency transit service
Solutions: 1.2 - Modify Parking Minimums

- Include a required range, providing flexibility for developers

- Case study: Schenectady, NY
  - No minimum in the downtown area
  - A separate minimum and maximum
  - Shared parking
Solutions: 2 - Shared Parking

Looking towards Waltham and Stoneham, MA

Williams College and Sts. Patrick’s and Raphael’s Parish

Williams College and the Clark Art Institute
Solutions: 2 - Shared Parking

**Colonial Parking Plaza**

**Daytime**
- Ron’s Auto Repair
- The Spoke
- Royal Cleaners
- Walgreens
- Mark Pullano (Dentist)

**Evening/Weekend**
- Korean Garden
- Desperado’s
- Silver Therapeutics
- Maestri’s Munchies

*Colonial Shopping Center - 17% usage*
Solutions: 3 - Paid Parking

- Increase perceived supply
  - Encourage Williams students and faculty to park in their assigned lots

- Good for business
  - Create turnover
  - First hour free

- Better economics
  - Generate revenue
  - Put the cost onto the user
Solutions: 4 - Parking Permits

This increases total supply without increasing asphalt!

More parking for residents at no additional cost

Allow overnight residential parking with a permit

Restrict non-permitted users to a 2 hour time limit
Solutions: 5 - Improve Parking Signage and Enforcement

- Compliance seems to be an issue:
  - Confusing signage, where to park?
  - Inconsistent enforcement

- Lack of compliance contributes to perception of parking shortage

- Synergy with other solutions!
People being silly (breaking the law!)
Future Projects: WCMA

- 70 spots (9 currently)
- Estimate ~99 car weekday peak
- Overflow options: Parking Garage and Clark Overflow

Questions to ask:
- Staff parking?
- Making walking more desirable
- Construction parking?
Thanks for Listening!
Questions?