King County

Washington APA Conference
Bellevue, WA
10/2/2013

Right Size Parking

TOOLS TO BALANCE SUPPLY

OUR PROJECT

Project scope

- Research
- Website Calculator
- Stakeholder outreach
- Policy guidance
- Demonstration projects

OUR PARTNERS

U.S. Department of Transportation
Federal Highway Administration

CNT
Sustainable Communities Attainable Results

Washington State Department of Transportation

Urban Land Institute
Northwest

Products

- Right Size Parking Website Calculator
  - www.rightsizeparking.org
- Technical policy memo
- Demonstration projects

WHAT DOES IT MEAN TO "RIGHT-SIZE" PARKING?

- **Right-sizing parking means striking a balance between parking supply and demand**

- **Oversupply** can be an impediment to achieving a wide range of community goals

- **Undersupply** can risk real estate marketability and negatively impact neighborhood impacts
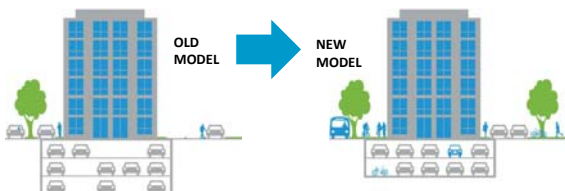
SUPPLY   DEMAND

Why Right Sized Parking is Important

Parking is very expensive to build.

Overbuilt parking reduces housing affordability and access to transit.

An oversupply of parking encourages driving and congests our roadways.

- **Community goals?**
- **Real estate marketability?**
- **Neighborhood impacts?**

WHAT'S THE PROBLEM?

OLD MODEL → NEW MODEL

- Existing tools and data are general and outdated
- Current policy regarding parking supply often undermines transit use and efficiency

Parking, housing, urban form and transportation – **how does it all fit together?**

Why so much parking...

- Overbuilding of parking
- High Vehicle Ownership
- Code requirements/Land Use Planning
- Single use parking facilities
- Market norms
- Lack of parking management/data
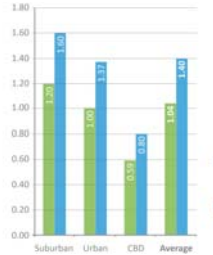- Undersupply anxiety
- Alternative Modes Stigmatized

Research Objectives

1. Identify independent variables, both from a theoretical framework and a practical development and planning standpoint, to be tested in regression analysis
2. Conduct variables' significance in predicting parking use
3. Develop a model using regression analysis, maintaining that all variables be significant and highly correlated.
4. Develop a website tool enabling interactive use of the model by interested stakeholders
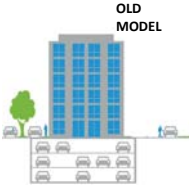

STUDY FINDINGS

On average, we found that **parking is supplied at 1.4 spaces per dwelling unit** but is only **used at about 1 space per unit**.

OLD MODEL

Utilization: Observed vehicles/Occupied residential units

Supply: Total spaces/Total residential units

When these findings are applied to a typical suburban project with 150 units, **roughly $800,000 would be spent on unused parking**.
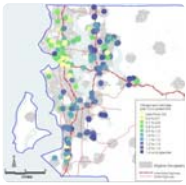
RESEARCH RESULTS

GEOGRAPHIC VARIABLES
- transit service
- population + job density

BUILDING VARIABLES
- bedroom count
- parking price
- affordable units
- residential density
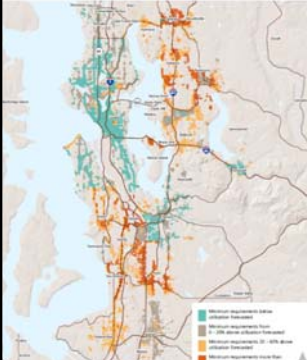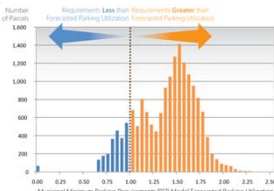- average rent

$R^2 = .803$

Demonstration Projects

Policy and Neighborhood Mitigation
- Assess MF parking regulations based on the research findings
- Develop model code and neighborhood engagement/mitigation strategies

Pricing and TDM
- Assess the market for pricing and financing parking in new MF projects
- Develop TDM strategies to support a balanced parking supply

District Shared Parking
- Assess potential for district shared parking with current excess supply
- Develop tools, strategies, and incentives to price parking and connect customers
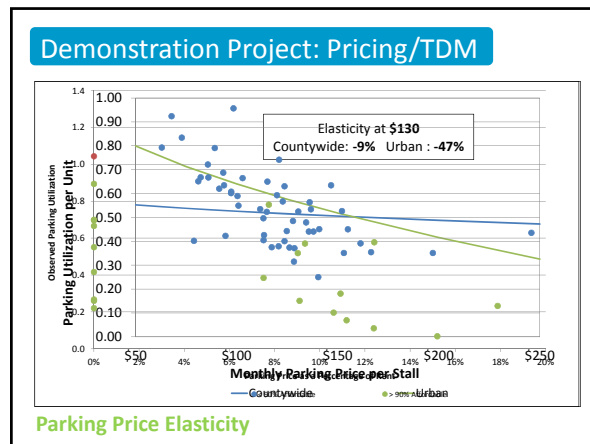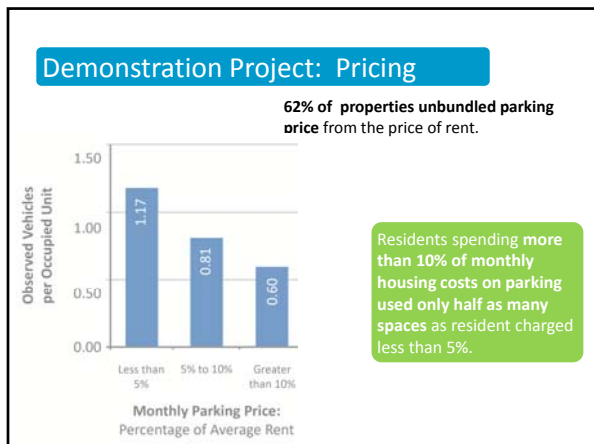
Demonstration Project: Policy

King County Minimum Parking Requirements Compared to RSP Model Parking Utilization

Outside Seattle, 82% of parcels have requirements greater than predicted use

Demonstration Project: Model Code

- **Market-based Approach (recommended)**
  - Remove parking minimums
  - Tie to neighborhood mitigation and on-street management
- **Context-based Approach**
  - Typology → Set base minimum
  - Apply context-based adjustments
    - Unit/tenant type, transit proximity, TDM, parking management, etc.

- **Pilot projects starting in September**
  - 4 cities
  - $100k of policy change funding
  - Adjusting minimums, on-street mgmt., shared parking

Demonstration Project: Pricing

62% of properties unbundled parking price from the price of rent.

Observed Vehicles per Occupied Unit:
- Less than 5%: 1.17
- 5% to 10%: 0.81
- Greater than 10%: 0.60

Monthly Parking Price: Percentage of Average Rent

Residents spending **more than 10% of monthly housing costs on parking used only half as many spaces** as resident charged less than 5%.

Demonstration Project: Pricing/TDM

Elasticity at **$130**
Countywide: **-9%**   Urban : **-47%**

Parking Price Elasticity

Demonstration Project: Pricing/TDM

Project Revenue: Parking Price Elasticity

Urban Project Pro Forma
- 25,000 sf site
- 6 story building
- 640 sf/unit
- Underground parking
- Land at $100/sf
- Unit rent at $2.2/sf
- Cap rate at 5%

Project Description			
Residential Units	150	150	150
Parking Spaces	75	150	300
Parking Ratio	0.5	1.0	1.5
Levels of Parking	1.3	2.6	3.9
Cost/ Stall	Profit Margin		
$150	23%	19%	15%
$100	21%	15%	9%
$50	19%	11%	3%

Demonstration Project: Pricing/TDM

Call for pilot project proposals
- RFI developed and sent out. 9 respondents. RFP sent soliciting more detailed proposals. Expect to identify pilots by mid-November.

  Pilot Project Elements:
  - Parking pricing
    - Transition to market rate or tiered pricing structure
    - Market excess parking to new user groups
  - TDM Programs
    - Transit subsidies or incentives
    - Bike or pedestrian infrastructure
    - Carshare membership or expansion

Updating RSP website!
- Looking for partners to update RSP data and website

RESOURCES

Right Size Parking Calculator
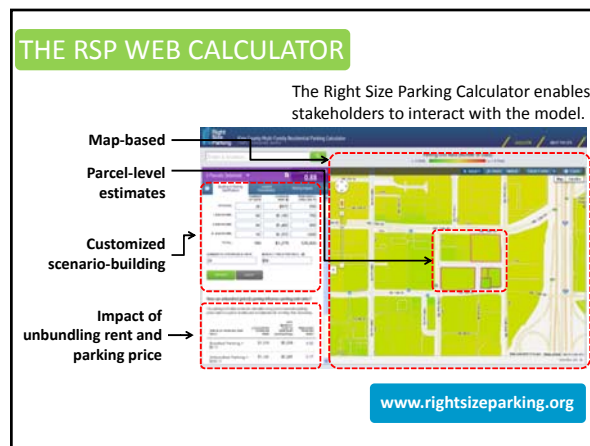www.rightsizeparking.org

Metro Transit's Right Size Parking Website
kingcounty.gov/RightSizeParking

Other
- Research Methods
- Technical Policy Memo
- Technical Research Memo
- Outreach Products
- ULI Event Recording
- Mixed Use Study (in progress)

Demonstration Products
(in development)
- Best Practices / Lit Review
- Policy Gap Analysis
- Model Code
- Developer Toolkit
- Case Studies

THE RSP WEB CALCULATOR

The Right Size Parking Calculator enables stakeholders to interact with the model.

- Map-based
- Parcel-level estimates
- Customized scenario-building
- Impact of unbundling rent and parking price

www.rightsizeparking.org

Search

View Regional Parking Use

Technical Background

Instructions and Video

Map Based

View Parking Ratio

Build a Scenario

Select a Parcel or Area

Adjust Building and Parking Specifications → Update → View Change in Parking Ratio

Adjust Location Characteristics → Update → View Change in Parking Ratio

View Impacts

Questions?

King County

Daniel Rowe, Right Size Parking Project Manager
Daniel.Rowe@kingcounty.gov
206-263-3586

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