Urban Parking & Transportation
Planning, Design & Management

Tools and Strategies

Carl Walker
Parking
Planning Engineering Restoration
Ideas for parking. SOLUTIONS FOR PEOPLE.

Innovative Design Development Codes:
Tools for Investing in Our Communities
July 30, 2008
Portland, Oregon

Introduction to Carl Walker, Inc.

Carl Walker, Inc. is a full service resource for:

- Parking Structure Design

- Parking Studies and Operations Consulting

- Parking Functional Planning and Design

- Restoration

- Structural Engineering

- Forensic Investigations

Integrated Parking & Access Management Programs:

> ➢ Supply-Side Management
> ➢ Integrated Access Management
> ➢ Leveraging New Technologies and
> ➢ The Experience Economy

Supply - Side Strategies

❖ **Supply side strategies maximize the efficiency of existing and future parking resources.**

   ❖ Key Strategies:

   - Know Your Resources

   - Shared Parking

   - Parking Regulations

   - Flexible Parking Standards

   - Parking Maximums

   - Smart Growth

   - Walking and Cycling Improvements

   - Parking Facility Design

   - Improved Parking Operations & Management

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Supply - Side Strategies

❖ **More Key Strategies:**

- Overflow Parking Plans

- Improved User Information and Marketing

- Parking Pricing

- Improved Enforcement & Controls

- Improved Payment Methods

- "Unbundling" Parking

- Parking Management Organization/Coordination

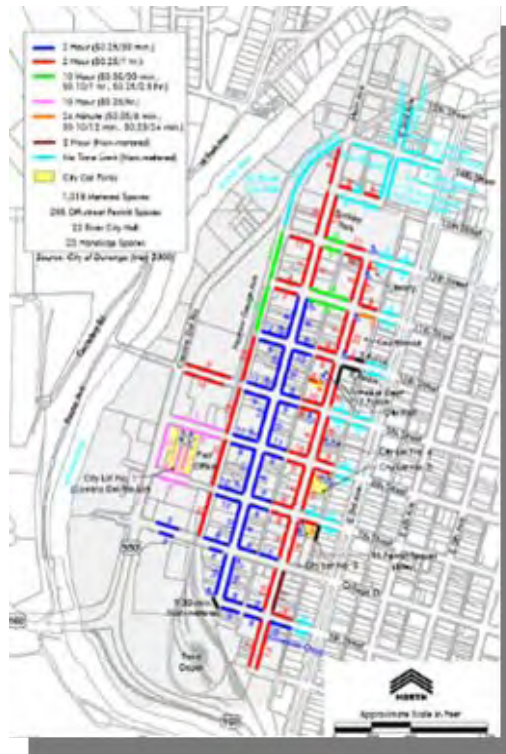- Guiding Principles

- Parking Environment Improvements

Know Your Parking Resources

❖ **It is important to have detailed and up to date information about parking resources for planning and customer education.**

On-Street Utilization

On-Street Time Limit Map

Supply/Demand by Zone

Shared Parking

❖ **Shared parking can have a significant impact on mixed-use development parking requirements.** **Combining land uses results in a demand for parking spaces that is less than the demand generated by separate, freestanding developments of similar size and character.**

❖ Shared parking is defined as parking space that can be used to serve two or more individual land uses, without conflict or encroachment

❖ The opportunity to implement shared parking is the result of two conditions:

- Variations in the peak accumulation of parked vehicles as a result of different activity patterns of adjacent or nearby land uses (by hour, by day, by season).
- Relationships among land use activities that result in people's attraction to two or more land uses on a single auto trip to a given area or development.

Usage Patterns

Office | Retail | Theater

Hotel | Hospital | University
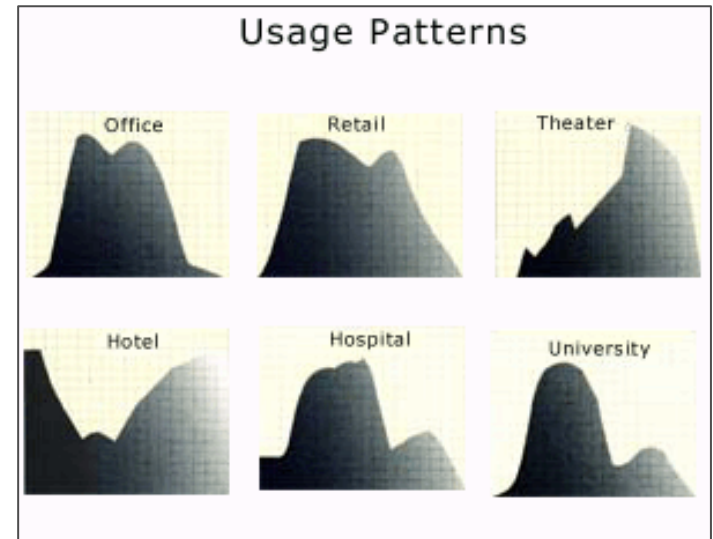
Parking Regulations

Common Parking Regulations:

Name
- User or vehicle type
- Duration
- Time period restrictions
- Employee restrictions
- Special events
- Residential permits
- Street cleaning restrictions

Examples
- Loading, Taxi, disabled, etc.
- 5 minute loading, 1-2 hour time limits, etc.
- Prohibited occupancy at certain times
- Promote customer use
- Restrictions during special events
- Residential permit program areas
- Allows for street sweeping.

Ideas for parking. SOLUTIONS FOR PEOPLE®

Flexible Parking Standards

❖ **More accurate and flexible standards means that the parking requirements at a particular location are adjusted to account for various factors.**

❖ <u>Examples of Adjustment Factors:</u>
- Geographic Location
- Residential Density
- Employment Density
- Land-use Mix
- Transit Accessibility
- Car-Sharing
- Walkability

Parking Maximums

❖ **Parking Maximums means that an upper limit is placed on parking supply, either at individual sites or in an area.**

❖ Area-wide limits are called Parking Caps.

- These can be in addition to or instead of minimum parking requirements.
- Maximums often apply only to certain types of parking, such as long-term, single-use, free, or surface parking, depending on planning objectives.

Walking & Cycling Improvements

❖ *Walking and Cycling* improvements support parking management strategies in several ways:

- Improving walkability (the quality of walking conditions) expands the range of parking facilities that serve a destination. It increases the feasibility of sharing parking facilities and use of remote parking facilities.

- Improving walkability increases "park once" trips, which reduces vehicle trips and the amount of parking required at each destination.

- Walking and cycling improvements allow these modes to substitute for some automobile trips.

Parking Facility Design

❖ **Parking facility design and operation refers to physical layout, construction and day-to-day management.**

❖ Improved design and operation can better integrate parking facilities into communities, improve the quality of service experienced by users, support parking management, and help address various problems.

Parking Facility Design

Integrating Street-Level Retail

Parking Facility Design

Supporting Increased Development Density and Mixed Uses

Parking Facility Design

Integrating Parking & Downtown Residential

Parking Facility Design

Complementary Design for Downtown Historic Districts

Parking Facility Design

Can Parking Be Green?

– Stand alone parking structures cannot obtain LEED certification at this time

– Parking can provide LEED points

– Mixed use parking structures can obtain LEED certification

- Santa Monica Civic Center

- Blue Cross Blue Shield

Parking Facility Design

There are many opportunities to include LEED green features in parking design

- Sustainable site development
- Water savings
- Energy efficiency
- Materials and resources selection
- Indoor environmental quality
- Innovation & design process

Parking Facility Design

Sustainable Parking & Transportation Management

- *Carl Walker, Inc.* has submitted a proposal to the USGBC recommending a defined program that would specifically assess a variety of parking and transportation demand management elements for inclusion in the LEEDs certification.

- The proposal is currently being considered.

Parking Facility Design & Operations

- ❖ **Integrating Passive and Active Security Measures**
  - Well lighted facilities that meet or exceed IES minimums.
  - Integrate CPTED principles into planning and design
  - Incorporate Passive security features during facility design.
  - Integrate parking attendants, cleaning and maintenance staff, shuttle drivers, etc. into your parking security program.

Parking Management
Organization/Coordination

In cities that have not developed comprehensive municipal parking programs (managing on-street and enforcement and owning managing significant off-street assets), one of the significant challenges is developing an effective parking organization to plan, coordinate and communicate parking programs.
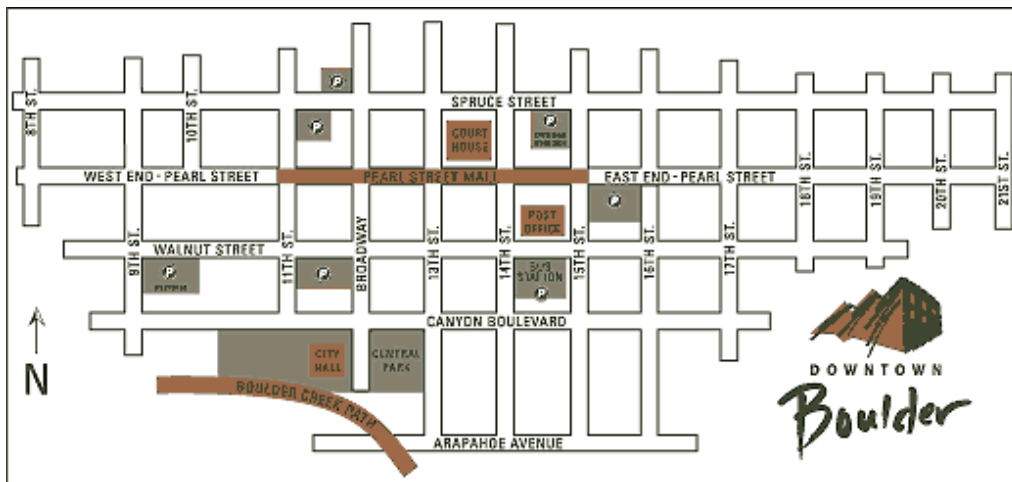
Parking Program Guiding Principles

Development of a set of parking system "Guiding Principles" is a good tool for communicating program goals and objectives to both staff and community stakeholders.

- ❖ Balanced Access
- ❖ Customer Service
- ❖ Maintenance
- ❖ Fiscal Responsibility
- ❖ Responsiveness
- ❖ Enforcement
- ❖ Education
- ❖ Urban Design
- ❖ Economic Vitality

Incorporating Art &
Interior Parking Environment Improvements

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Integrated Parking & Access Management Programs:

To Support Urban Environments

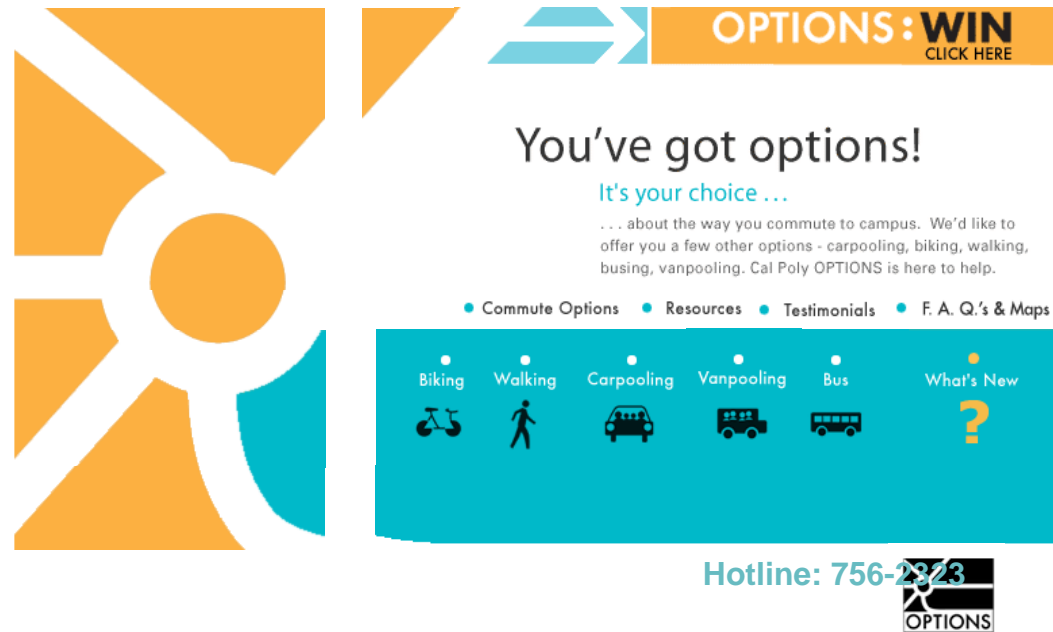# Transportation in Urban Environments

The Formula for Success

Smart development +

Travel options +

<u>Active promotion</u> =

SUCCESS

- Create environments that support access and mobility
- Provide realistic travel options.
- Educate users about the options.
- Use incentives to allow for rational decision making.
- Monitor performance and make adjustments.

Influencing Transportation Demand

- Parking is a key element in influencing travel choices and managing demand.

- Having other quality choices and effectively promoting them is critical.

OPTIONS : WIN CLICK HERE

You've got options!

It's your choice ...

. . . about the way you commute to campus. We'd like to offer you a few other options - carpooling, biking, walking, busing, vanpooling. Cal Poly OPTIONS is here to help.

- Commute Options   - Resources   - Testimonials   - F. A. Q.'s & Maps

Biking   Walking   Carpooling   Vanpooling   Bus   What's New

Hotline: 756-2323

OPTIONS

An Emerging Case Study:

❖ **Boulder Transit Village**

- The goal is to provide multi-modal options, combined with strong parking management to allow high density development with minimal <u>congestion</u>

- Will require active promotion to inspire <u>confidence</u> in the travel options provided.

- Education will minimize <u>confusion</u> regarding innovative parking management strategies.


Transit Village Area Plan

Integrated Parking and TDM Strategies

- **Integrated Access Management**
  - Parking arrangements based on priority
    - On-Street parking for high turnover businesses
    - Financial incentives facilitate parking location decisions
    - High priority uses, such as hospital clinics have up front parking
  - Fully unbundled parking for both residents and employers
  - Parking Maximums vs. Minimums
  - No monthly parking passes for employees – daily charge using debit card technology
  - Preferential parking for HOV

Integrated Access & Environmental Design

- **The Experience Economy**
  - Goods and services are no longer enough.
  - To be successful in today's increasingly competitive environment companies must learn to stage experiences for each one of their individual customers.
  - Enter the Experience Economy, a new economic era in which all businesses must orchestrate memorable events for their customers that engage each one of them in an inherently personal way.

  - How does this translate to urban planning?
  - How can we integrate these concepts into support services like parking and transportation?

The Experience Economy

Work is Theatre &
Every Business a Stage

B. JOSEPH PINE II
JAMES H. GILMORE
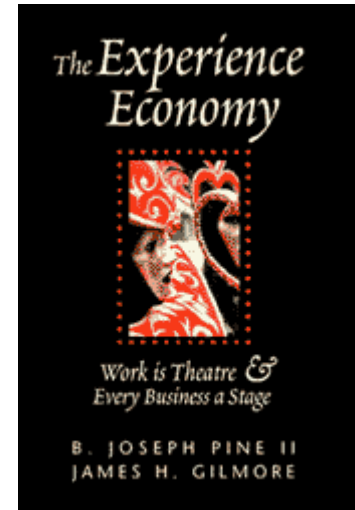
"If you plan cities for cars and traffic, you get cars and traffic.

If you plan for people and places, you get people and places."

- Project for Public Spaces

Thank You!

Discussion