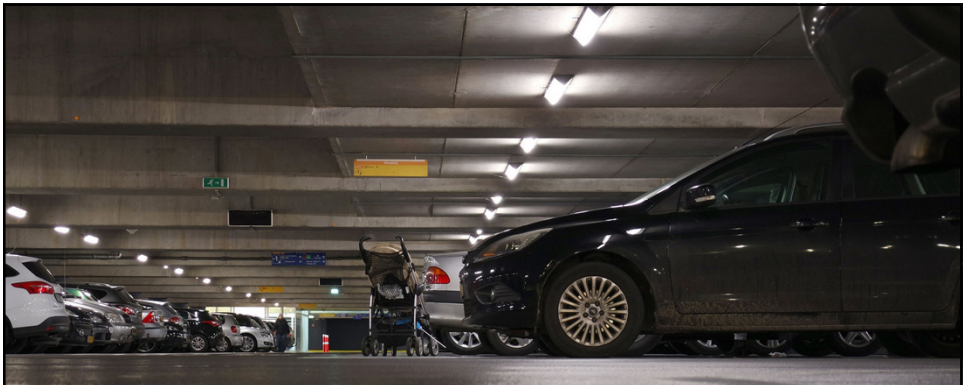


# Solar PV Carports Secondary Benefits



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## The Parking Lot Opportunity

- Hundreds of Millions of Parking spaces (US)
- 8 parking spaces for every car
- Urban blight – up to 1 / 3 of cities are parking
- Environmental Impact
- Resources Underutilized

## Green Surface Parking Concepts



## Demonstrator Sites



Photo by Dan Ciarcia



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## Solar Carports: Secondary Benefits

- ▶ Realized Beyond the Financial ROI Calculation
- ▶ Difficult to assess
- ▶ Often more significant than ROI



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## Heat Island Mitigation



- ▶ Pavement MUCH hotter than vegetated surfaces
- ▶ PV Panels Don't Contribute to Heat Island
- ▶ Safer to breath! More Energy Efficient!



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## Happier Vehicles

- ▶ Cooler Vehicles
- ▶ Reduced A/C
- ▶ People & Pets Less Stressed
- ▶ Reduced Fuel Evaporation
- ▶ Lower Food Spoilage
- ▶ Extends Vehicle Life



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## Let It Snow

- ▶ 70% power offset (~40 homes)
- ▶ 1 work week gained per storm
- ▶ Reduced liability insurance



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## Energy Storage & EV

- ▶ Great Locations for Storage
- ▶ Smart Grid Integration
- ▶ Offsets EV Charging & Peak Power Demand
- ▶ Vehicle to Grid (V2G) is Emerging



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# Community Use



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Placemaking • Event Space • Educational



# Improved Area Lighting



Burbank Water and Power (CC BY-SA 2.0) <https://flic.kr/p/bu337t>



## Customers



Photo courtesy of Power Parasol

- ▶ Increased Customer Traffic, Loyalty and Sales
- ▶ Opportunities for Advertisements / Promotions



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## Consider the Big Picture

- ▶ ROI is not the whole story
- ▶ Consider additional benefits
  - Many times they can be monetized
- ▶ Look beyond the current usage model
  - What new uses open up?
  - What costly practices can be eliminated?

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