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Newsletter

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Solar Power For Your RV – Is It Worth It?

Article submitted by user.

There are many benefits of having solar on your RV but there are also reasons why you should NOT install solar. This article will help you figure out whether an onboard solar system will benefit you and your style of RVing. I'll also layout the components of an RV solar system, what they do, and how much they cost.

If you have unanswered questions about solar for your RV like *"Is solar worth the investment?"* or *"How much does an RV solar system cost?"*, then hopefully you'll leave here with an answer.

My wife and I have enjoyed RVing with solar and being off-the-grid for many years now, but our priorities and reasons for doing so may not be the same as yours. **Take your time and learn as much as possible to really understand your options.** That way you'll have realistic expectations and know that your money is well spent on a system best suited to your needs.

Will You Benefit From Solar?

The only time you will benefit from solar is when your RV is disconnected from shore power. There is no reason to have solar on your RV if you primarily stay in full-hookup RV parks.

If you enjoy boondocking for days at a time in sunny locations (like the Southwest), a permanently installed RV solar system could provide the energy independence you're looking for.

If occasional boondocking is your thing, then a portable solar panel kit may be all you need to benefit from solar and avoid a potentially costly permanent installation.

Making your own portable solar panel charger is a great way to learn the basics of solar. I'll show you how in this article. Would you rather buy a pre-assembled kit like the one shown above? If so, there are several portable panel kits on Amazon.

How Solar Changed our RV Life

Having the ability to travel and camp off-the-grid in our RV has totally changed how we RV for the better. Electrical power is now a renewable resource. There's very little to do except monitor the system.

Having electrical independence has given us the freedom to travel and camp OUR WAY with few limitations. Being off-grid and fully powered adds a level of freedom we've never experienced before. It simply feels natural now.

Solar is for Battery Charging

A common misconception is that solar panels will power your RV. While this is not entirely false, it is a mistake to think of solar panels in that capacity. **The primary purpose for solar panels on an RV is to recharge your battery bank** when not connected to shore power or generator.

A solar charging system requires no gas, makes no sound and can charge your batteries for hours and hours unattended as long as the sun is shining. Without sun, you'll need to resort to one of these other methods.

- **Generator** – Your RV on-board or portable generator is the most common recharge method, but generators require a steady supply of gasoline to run. The noise levels can also disturb nearby campers.
- **Alternator** – Some RVs can charge both the chassis and house batteries while driving.

Why Don't RVs Come With Solar?

Solar charging systems are not standard equipment on most RVs. Why? Full off-grid solar charging systems have multiple components that need to be customized to an RV owners specific needs.

In a well designed off-grid RV solar system, all components are carefully selected and sized with the RV owner's needs and style of camping in mind.

For this reason, I believe it would be a waste of money for the manufacturer to include a solar system not knowing who the RV owner will be. Doing would also drive the sale price of the RV higher.

So I believe it's best to keep solar as a custom option.

What RV manufactures often do is to pre-wire an RV for solar and call it **SOLAR Ready**.

If you buy an RV that is pre-wired for solar, **chances are you or your installer will want to redo the wiring anyway** to better satisfy power capacity and rating requirements.

How Much Does an RV Solar System Cost?

Most systems are heavily customized for the RV owner and involve much more than installing a few solar panels on the roof. So there's no simple answer to this question. The overall cost of a solar system on an RV can vary considerably from one RV to the next.

Excluding any design and installation costs **you could spend between \$1,500 for a basic system all the way up to \$15,000 or more for a high-end system**. That's just for major system components. The cost of cables, connectors, fuses, circuit breakers and everything in between can add up quickly. So keep that in mind. If you end up hiring a professional installer to design and install a custom system, then your costs will probably be much higher.

You can cut labor costs if you do-it-yourself. But if you need professional assistance, here's a list of solar installers that can help you.

Is Solar Worth The Investment?

If you are a new RV owner I recommend using your RV for a while before making any major upgrades. Over time you will figure out what your camping preferences and limitations are. Then you'll be in a better position to decide whether an investment in solar is something you'll benefit from.

Experienced RV owners will probably already know whether they need solar or not.

If you feel camping off-the-grid is something you're interested in, then I encourage you to try it out first before making a significant investment in solar or a generator. Here are some **boondocking tips for beginners** to get you started.

Consider starting out with a portable solar panel kit like one of these available on Amazon. There is no permanent installation required and they provide plenty of power to keep your batteries charged. Just store the portable panel when you don't need it.

You could even create your own portable solar battery charger. Building your own is a fun way to learn the basics of solar. Here's a simple project video showing **how to build a basic portable solar charger**.

How Can Off-Grid Solar Expand Your Camping Options?

Being self-contained and self-sufficient in your RV will enable you to stay anywhere you're allowed to. Not having to rely on full-hookup campsites means you can take ANY campsite or find FREE camping options.

There are many beautiful campgrounds located on public, National Park, or State owned land. Camping at these campgrounds is inexpensive and often free. But, **what you gain in beautiful scenery and solitude you lose in amenities.**

When we first started RVing, we primarily stayed in RV parks. We didn't even consider locations that did not have full-hookup sites. Over the years our preferences have changed. **We still stay at RV parks periodically, but prefer to seek out more scenic locations that offer more privacy.**

We enjoy the freedom and spontaneity of not having to make reservations. We often just hit the road not knowing where we'll end up.

At first my wife was a bit uncomfortable with the idea of being off-the-grid and having to sacrifice too many creature comforts. These days she is totally on-board with boondocking without hookups. Here's a fun video of Melissa and I sharing our evolution from RV park camping to boondocking.

Do You Need a Generator If You Have Solar?

There will be times when you'll want to run a generator. **Solar is not going to recharge your batteries on rainy days, through dense clouds or when camped in the woods. This is when a auxiliary generator comes in handy.** A generator can also power an air conditioner, heater or other power hungry appliance when you're battery bank and inverter can't.

This article ***Generating Power While Boondocking*** will help you determine what your energy requirements are and whether you'll need a generator to supplement your solar.

There are cases when some have abandoned their generator completely and made the necessary adjustments for living solely off of solar.

If you have a residential fridge or need to run an air conditioner, having a generator as a backup is recommended.

Our energy needs are pretty light and we prefer only to boondocking in locations with a moderate climate. So we have less of a need for a generator. For that reason I removed ours and haven't missed it. Solar is our primary source of battery charging and our motorhome's engine is our second.

What Can You Power With Solar?

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Learn more about the off-grid solar power system on our RV

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Read this article to learn what factors affect the cost of an RV solar system and to see material cost estimates for typical off-grid system configurations.

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Dispersed camping on public land requires you to be self-sufficient.

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What Can You Power With Solar?

The **solar panels on your RV are used mainly for battery charging.** Therefore, the amount of power (electrical load) you can draw is determined primarily by the capacity of your battery bank and inverter, and NOT by the amount of solar on your roof.

This is a common misconception people have when they ask "*how many solar panels do I need to run my whatever?*" Instead they should ask "***how much battery capacity and what size inverter do I need to run my whatever?***"

Lights (preferably LED), laptop computers, radios, fans, TVs, water pump and other small items can be used while on battery/inverter power. In some cases small coffee makers, low power microwave ovens, toasters, and low power hair dryers can be used for very short periods depending on your battery capacity and inverter size.

High power consumers like air conditioners, heat pumps, space heaters, or water heaters generally require more power than a standard RV solar/battery/inverter system can provide.

Power hungry components like those will rapidly drain your RV batteries. For this reason, most RVers who rely on solar will move throughout the year to sunny locations with moderate climates. Keeping cool means opening windows and/or turning on an electric fan, not running an air conditioner.

Is it possible to run an air conditioner off of an RV battery bank? Yes it is. Is it a practical solution? Usually no. Even as more RVers opt for lithium batteries it's still good practice to use your energy efficiently.

An RV powering their A/C unit while boondocking used to be an anomaly. More and more people now have the ability to run an air conditioner with the help of large lithium battery banks, soft-start devices, and highly efficient A/C units. It certainly isn't mainstream by any means. So, for now, I'd stick with the "***if you can't stand the heat...get out of the desert***" approach.

Residential refrigerators are large power consumers that run 24/7. So if you're looking to buy an RV with a residential refrigerator, just know that boondocking will be challenging. You'll need a large lithium battery bank and large solar array.

Experiment to Determine How Much Power You Need?

The best way to figure out what your needs are is to just go do some dry camping for a few days while measuring your power usage. This is an essential first step to figuring out how much power you need while out camping.

To get an accurate indication of your state of charge, **you will need a good battery monitoring system (BMS). Without one, you'll simply be guessing** and probably guessing wrong. Keep in mind that the battery voltage or level gauge that came with your RV will NOT give you an accurate measure of your battery state-of-charge (how much reserve power available).

Here's what you do.

1. **Fully charge your battery bank.**
2. **Take your RV dry camping** and watch that battery monitor. You won't need solar panels for this experiment. Just use your RV and see how long it takes to get down to 50 percent of available capacity (if using lead acid batteries). Can you make it through a 24 hour period?
3. **Recharge when you reach 50 percent** if you have flooded or AGM batteries. 50% is your "usable" capacity.
4. **Take note of the equipment you've used and for how long.** Here are some *tips to help you determine your RV battery capacity and typical power consumption*. If you need more power, add more battery capacity and try again.

Try to get through a good 24 to 48 hours before you need to recharge. Everybody's needs are different, but having enough battery capacity for at least two days is a good benchmark to start with.

Once you've figured out how big your battery bank needs to be, you'll have a good idea of how much solar you will need to keep those batteries charged up.

EXAMPLE: If your 200 amp hour battery bank gets down to 50 percent in 24 hours, then you've used approximately 100 Amp Hours of capacity during that time. So if you need 200 amp hours to live, then you'll need a 400 amp hour lead acid battery bank or a 200-300 amp hour lithium LiFePO4 battery bank.

Do you have lithium batteries?

If you do, then ignore the 50% rule. **The usable capacity of most lithium (or LiFePO4) batteries is between 80 and 100 percent of the battery's rated amp hours.** This means you can repeatedly use 80 to 100 percent of the battery capacity without damaging the battery (ask your battery manufacturer for the exact numbers).

A simple way to estimate how much solar power you'll need is to apply the **1 Watt to per Amp Hour rule**. Simply put, your maximum solar output (in watts) should equal your battery capacity (in amp hours).

EXAMPLE: A 400 Amp Hour battery bank will need roughly 400 Watts of solar. This is just a rough measure to get you in the ball park. You should also take into account the efficiency of your panels, amount of sun in your area, cable size/length, and power loss between your solar panels and batteries (i.e Voltage Drop). I recommend adding at least 20 percent to the solar estimate to account for these factors.

Continue Reading about RV Solar

That should get you off to a good start. When you are ready for more, these articles will help you take it to the next level. I've also put together this free resource for you.

What is the best solar panel for my RV and how many do I need?

Sunshine on my shoulders makes me happy! Okay, I'll leave the song references to Mike Sokol, but sunshine can make your house batteries happy and happy batteries mean a happy camper. What I'm talking about is using the power of the sun to charge and condition your batteries using solar panels.

Price vs. quality

There are three types of cells available for manufacturers. Monocrystalline cells are the most

durable and most efficient; however, they are the most expensive. Many discount tool stores and home improvement stores sell inexpensive solar panels that typically will not hold up to the abuse they encounter in the RV world. For the past five years, I have worked exclusively with Zamp Solar (now owned by Dometic) and Go Power! and have had great success. All the products we have installed are still working as designed. They are easy to install, use high-quality materials, and if a cell does get compromised, it doesn't shut down the whole panel. There are some other good products out in the market, so enough of the commercial!

Here is how a solar panel works:

The solar panel catches the sun's rays and converts them to DC charging power, similar to a filling station providing fuel. This fuel travels through a solar controller that monitors the amount of fuel in the battery and will shut off when the batteries are charged properly. A controller is important as a consistent charge to the batteries can overcharge or "boil" them and cause damage. This is a similar procedure the shoreline cord provides when plugged into a campground source as it travels through the converter and charges the batteries. If you want to get more technical into how the photons knock the electrons from the atoms and allow the flow of energy, click here.

The basics are this: Your house batteries simply store energy known as amp-hours, which run 12-volt DC components such as interior lights, roof vent fans, water pumps, and any LP devices such as refrigerators, stovetops, water heaters, and furnaces. As your battery is drained of amp hours, you will need to replenish them with either shoreline power or generator through the converter/charger or with a solar panel system. If you are boondocking or dry camping, you will need to either run a generator for long periods of time, or have a solar panel system.

What will my solar panels run?

Technically nothing! The solar panels only provide a charge to the batteries. The house batteries provide 12-volt deep cycle power for the components in your rig.

What size and how many panels do I need?

Solar panel technology has changed dramatically. The newer panels are lighter, smaller, more powerful, and more affordable. There are several sizes to choose from depending on your needs from small backpack-sized ones to larger 190-watt panels that can be combined to provide 570 watts of charging power!

To determine the size of panels and how many are needed for your rig you have to determine your amp draw needs. First, you need to identify the components that run on DC and how long you will use them in a day. Here is a chart with some common components and amp draws:

12-Volt amp draw:

- Incandescent Lights: 1.5 amps
- Halogen Lights: 1 amp
- LED Lights: 0.12 amp
- Smoke Alarm: 1 amp
- CO Detector: 1 amp
- LP Leak Detector: 1 amp
- Furnace: 10-12 amps
- Water Pump: 5 amps
- Refrigerator on LP Mode: 2-3 amps
- Stovetop: 1 amp
- Roof Vent: 3 amps

Note: If you have a residential refrigerator and run it through an inverter, this will deplete your batteries quickly!

What's the calculation?

The next step is to multiply your total daily hours by the number of days you are going to be out and compare that to the amp hours your battery or batteries can provide.

The challenge most of us will have is trying to figure out how much and how long we are actually going to be using these items. It will change with the ambient temperature, how many people we take on a trip, and other factors. Go Power! has a very sophisticated calculator that

you can download here.

How many panels and how big?

So, back to the question: How many panels do I need and how big/wattage? One group 24 deep cycle battery is rated at approximately 80-100 amp hours; however, you can only drain a lead-acid battery and AGM down to about 50 percent, so that means 40-50 amp-hours. A typical RVer could draw 1/3 usable amp-hours per day or more. A 100-watt solar panel can generate 5.5 amps per hour in full exposure, which means it could keep up in this situation if you get a full 6 hours of exposure. By the way, this comes from Dakota at Zamp Solar, who answers the phone every time I call and knows the product as good or better than the others I've talked to. I would highly recommend talking with him if you have questions!

But there are several other variables to consider, too, such as weather, temperature, and battery condition. Severe weather means RV owners are inside the rig more often and using components that draw more battery power. Plus, this generally means less exposure to the sun. Extreme high temperatures mean appliances such as the refrigerator run more often, and vent fans are running, which means more 12-volt power draw as well as the furnace in low temperatures. "Typical" usage in an RV is hard to calculate! Keep in mind, you can start with one or two panels and if that is not keeping up a charge, you can easily add more.

AirSafeHitches.com



Why Use an Air Hitch?

AirSafe is committed to giving you the safest and most comfortable ride possible. We offer the largest selection of air hitches in the industry, including 5th wheel hitches, gooseneck hitches, and receiver hitches for trailer hitches for trucks.

Our hitches utilize the most innovative engineering and design available on the market today. With a fully height adjustable design, AirSafe hitches are easy to use and don't cause any headaches.

Air Safe Hitches also delivers the ultimate in safety.

With only 10% trailer inertia, our hitches make your vehicles sway a lot less. By evenly distributing the weight between the trailer and the tow vehicle, you will have more ability to brake and steer safely.

AirSafe Hitches are the safest way to tow anything, and they provide the most comfort of any ride. If that isn't enough to convince you, these hitches are also affordable. With AirSafe Hitches, you get safety, comfort, and savings all in one.

5th Wheel Hitches - Omni-Directional 4 air bag vs competitor 2 air bag system. A four-air bag hitch is designed to allow the hitch head to move on the air bags in any direction based on articulation from the trailer itself. The result of such continuous motion results in a smooth ride and decrease chucking and surging forces from the trailer on the truck. In addition to the movement from the trailer, the 4-airbag hitch support 100% of the pin weight, increasing the effectiveness of the air springs. This results in a smooth and controlled motion for the trailer on the truck.

Receiver Hitches – If you want a smoother ride and the ultimate in control, then you need the advantage provided by Air Safe Hitches with the Receiver Hitch by AirSafe™. With an Air Safe Receiver Hitch you will get a 90% smoother ride than with a traditional hitch, which can save you money. Glide across the highways and roads avoiding the constant bouncing, which leads

to a decrease in gas mileage and early wear and tear on your tires. Our Air Safe Receiver Hitches also reduce stress on your truck and trailer suspension and help eliminate breakages inside the trailer. Our design allows total air ride vs the Shocker Hitch with the hinged approach.

Gooseneck Hitches – Air Safe offers the industry’s largest selection of air hitches. Innovation and engineering insures you receive the safest and smoothest ride. “Enjoy the ride, arrive alive.” With AIRSAFE™ you stop the flow of shock flow between the tow vehicle to the trailer and greatly reduce the explosion of energy when these two forces meet. The patented AIRSAFE™ hitches are engineered so the connection to the trailer is separated from the connection to the tow vehicle by an industrial strength airbag. Air Safe Gooseneck Hitches by AIRSAFE™ are simply the best air product money can buy. They are engineered with you and your precious cargo in mind. Simply remove your existing gooseneck tube and coupler and replace it with the AIRSAFE™ system. Available in round and square necks.

[Click to check out the benefits of an air hitch vs a rigid hitch.](#)

Will Your Next Tow Vehicle Be Electric?

After decades of promises, technology has matured to a point where electric vehicles (EV) and plug-in hybrid electric vehicles (PHEV) are reliable, environmentally friendly alternatives to their gasoline- and diesel-powered counterparts. Although the current EVs and PHEVs are still not the best tow vehicles, a few of them allow eco-conscious consumers to reduce greenhouse-gas emissions, save money on fuel on their daily commute, and use the same vehicle to tow a lightweight trailer.

EV Tow Vehicles Not Ready for Prime Time

Pure EVs are currently still limited as tow vehicles for several reasons. First, there is the matter of how much energy can be stored in today’s best batteries. The Tesla Model X Long Range has the most energy-storage capacity of any current EV — 95 kilowatt-hours of usable energy (100 kilowatt hours advertised). By comparison, the 23-gallon fuel tank in a Ford F-150 has the equivalent of about 750 kilowatt-hours of energy storage, depending on engine choice and fuel-tank capacity.

The Tesla can travel up to 328 miles, while the F-150 has a range of about 500 miles. A 2020 F-150 pulling a trailer reduces fuel mileage from about 22 mpg to 11 or 12 mpg, and range to around 250 to 260 miles, depending on the vehicle configuration and trailer weight. When pulling a 5,000-pound trailer with a Tesla X, this author’s experience has shown that range drops by about 40 percent, or to about 100 miles, and that’s not on hilly roads.

Only when 200- to 300-kilowatt-hour battery packs become available, which is now becoming the case, will an electric tow vehicle seriously compete with those with a gasoline or diesel engine. Even then, there would still be a weight and volume penalty. The Model X Long Range batteries weigh more than half a ton, so an EV would likely be penalized when it comes to gross combined weight rating (gcwr). The Tesla has a 4,960-pound towing capability, along with a gross vehicle weight rating (gvwr) of 6,758 pounds and a gcwr of almost 12,000 pounds. By comparison, a Ford F-150 with the same gcwr can tow up to 7,500 pounds.

Still, it is clear that the Model X was built with towing in mind. It has a “trailer mode” that activates Trailer Sway Mitigation, where automatic braking of the vehicle’s individual wheels can prevent a trailer from swaying dangerously. It also disables many of its driver-assistance features like automatic steering and parking, active cruise control and the rear parking sensors.

In general, EVs have gobs of torque for accelerating and hill climbing, since electric motors can produce maximum torque at zero rpm. You have probably seen ads with a Tesla pulling an airliner and a prototype electric Ford F-150 pulling a long string of freight cars.

New Electric Pickups Could Do the Job

Within the next few years, there could be a half-dozen electric pickups and SUVs with towing capability rivaling gasoline pickups.

Leading the way is the **Tesla Cybertruck**. Tesla says the top Tri Motor AWD model will be able to tow as much as 14,000 pounds and have a range of 500 miles. A base Single Motor RWD will tow 7,500 pounds with a 250-mile range, and a Dual Motor AWD will provide 10,000 pounds and 300 miles. Granted, those ranges are for driving solo, not towing, and have not been evaluated in the real world.

Next up is the **Rivian R1T**, which the company says will be available by the end of this year with 105-, 135- and 180-kilowatt-hour battery packs with estimated ranges of 230, 300 and 400 miles, respectively. All versions will have the ability to tow 11,000 pounds. While Rivian is a startup, it has some serious backing. Ford has invested heavily in it, and Lincoln's first EV will ride on Rivian's flexible "skateboard" chassis. Amazon recently placed an order with Rivian for 100,000 electric delivery vans.

Rivian has shown a camper version of the R1T that includes a pullout kitchen. The electric double induction cooktop runs off the truck's main drive battery. In general, the EV battery could be used for campsite power, eliminating the need for a generator.

Another startup, **Bollinger Motors**, plans to offer its B1 electric SUV and B2 electric pickup later in 2020. They will have gvwr ratings exceeding 10,000 pounds, making them Class 3 trucks. Range of both is estimated at 200 miles from a 120-kilowatt-hour battery pack. They could tow up to 7,500 pounds.

Ford plans to offer as many as 16 pure EVs by 2022, starting with the Mustang Mach E. This four-door SUV with a range of up to 300 miles will be offered in 2020 as a 2021 model. The Mustang SUV will be followed by an electric F-150 pickup, whose capabilities are still mostly unknown.

General Motors recently announced its all-electric pickup will be called the **Hummer** — yes, the Hummer is back. Initial reports don't provide range or towing capacity, but the latter should be impressive since it is reported to have 1,000 horsepower and 11,500 lb-ft of torque. The new Hummer EV will be built in GM's Detroit-Hamtramck Assembly plant and sold through GMC dealerships. It should be available in 2021.

EV startup **Lordstown Motors** plans to offer its Endurance pickup in late 2020. Again, not much is known about the Endurance except that it will probably feature a four-wheel-drive "hub motor" system, have at least a 200-mile range and be capable of towing 6,000 pounds.

Nikola Motors, which has been developing fuel-cell electric vehicles (FCEV) and battery-electric semis, announced it will offer FCEV and EV Badger pickups later this year. While an FCEV pickup may not yet be a suitable RV tow vehicle because of the lack of a hydrogen-fueling infrastructure, a battery-electric Badger could be quite competitive. Nikola is planning to build hydrogen filling stations, but these will be mostly along well-traveled truck routes. Nikola is claiming a 300-mile range and around 8,000 pounds of towing capacity for the battery-electric Badger.

Plug-in Power Charging-station access is not an issue for plug-in hybrids since they operate on an internal-combustion engine when the Li-ion battery is discharged. Batteries in conventional hybrids are charged by the engine and during braking, and they have very little or no electric-only range.

Pure electric vehicles are a different story. They can be charged with a standard 120-volt wall outlet, but this form of charging, referred to as Level 1, is the slowest method. As of May 2019, more than 68,800 Level 2 (240-volt) and Level 3 (DC fast-charging) stations were available in the United States. Of those, about 10,860 are dedicated Level 3 stations that make long-distance travel more practical for EVs.

With a Level 2 charger, it typically takes about seven hours to recharge a battery to get 200 miles of range. This goes down to about an hour with a Level 3 fast-charger.

Chargers are not universal. While Level 2 chargers have universal charging capability so all EVs and PHEVs can use them, only certain Tesla models can use Tesla's V3 Supercharger's latest maximum 250-kilowatt capability, for instance.

A majority of charging stations are in California, Florida, Texas and New York, with only a few dozen in states like North and South Dakota, Wyoming and Montana. For this reason alone, a pure EV is probably not a wise choice for towing in less populated states. This undoubtedly will change as EVs become more popular.

2021 RV shipments still climbing: Where will we stay?

By Russ and Tiña De Maris

The boys back in Indiana are practically dancing a jig: The RVIA (RV Industry Association) projects manufacturers could roll as many as 515,000 rigs to dealers in 2021. If the dealers sell them, where will your RV stay? We don't mean, where will you park your rig when it's not on the road – we mean, *where will you stay when you're on the road?*

Conveniences become necessities

In these days of “conveniences” looking more like necessities, having a place to plug the shore-power cord in on a regular basis is becoming a big thing for many RVers. An RVtravel.com poll asked readers how long they could go without having to have shore power service. Only 28% of all respondents said they could do without an electrical hookup indefinitely. That left 72% who said they'd need a hookup sooner or later, many every night, a few saying in a week or two.

Where will your RV stay when you're out and about? The RVIA says approximately 9 million U.S. households own an RV. Not all of those are on the road, but the average American uses their RV at least two weeks a year. Nine million RVs. Now add on the estimated half-million or more (potentially 515,400) new RVs that could hit the road next year. Comparing the huge 2020 movement of new RVs (423,628) to the projection is more than a 21% “bump” in the potential number of RVers looking for a place to overnight.

We asked readers if they found it more difficult now to get an RV park space without a reservation than it was five years ago. Answer? More than 91% of you said, “YES!” So if it was more difficult then, what about next year, with 20% more rigs competing for spaces? Surely, with such demand for RV park sites, one would expect that developers are jumping at the chance to fill the need. Right?

Will RV parks fill the need?

David Basler, a spokesman for the ARVC, “the” association of RV parks and campgrounds in the U.S., shared a few insights. First off, the question of where will your RV stay in light of the surge of new RVs is a question that concerns his organization. He pointed out that while public lands agencies are struggling to provide new spots, members of his organization – private industry – are indeed expanding. “The private industry is growing,” Basler told us, “not at a comparable rate [to that of new RVs built], but at a rate that we'll keep up.”

ARVC provided some numbers showing how it figures RV park owners will keep up with the demand. Looking at the numbers gave some initial assurance: In 2019, ARVC members had 1,190,000 RV sites with hookups available. By this year, that number pushed up to 1,225,000 sites – nearly a 3% increase. But what about 2021? Not all the numbers are yet available, but Basler says ARVC anticipates an increase of some 52,300 sites, taking the total to a potential of 1,277,300 hookups.

Let's see here. 52,300 new hookups – that's a 0.187 percent increase in sites, compared to a 20% increase in RV production. We're not sure how ARVC figures those two numbers are congruent with the thought that private RV parks “will keep up” with the potential demand. Basler tells us that RVers will just have to do better about “planning ahead” when it comes to routing and reservations.

Changes hard to choke down

For those of us who “cut our teeth” in the RV lifestyle, these changes aren't going down easy. The days of figuring out where will your RV stay overnight an hour before “quitting time” are pleasant memories. “Spur of the moment” joins the ranks of mercury-free tuna fish and pay telephones on every corner. These writers predict that if the RV manufacturing industry doesn't do a much better job of working with groups like the ARVC, they may well find a sudden drop in demand, if RVers find themselves getting frustrated with no place to go.

Here's a wild thought: Let the RV manufacturing/retailing industry set aside a percentage of their sales and use it to incentivize development of more RV park sites.

RVing and camping ranked safest way to travel in 2021

By **Emily Woodbury**

April 3, 2021

RVezy, a North American RV rental marketplace, revealed findings from a new travel survey (conducted by Abacus Data) highlighting the impact of COVID-19 on American travel plans for 2021. According to RVezy's new survey, RVing and camping ranked as the safest travel options for 2021, with 66% of Americans considering the activities as "not risky." Despite the increase in vaccine rollouts, the survey also highlighted that 94% of Americans mentioned "doing something safe" as a top priority for their vacation plans.

The main reasons why Americans are considering an RV trip this summer include:

- Being outdoors with self-contained accommodations
- The ability to avoid crowds and maintain social distancing
- No need to quarantine before, during, or after your trip

"Our survey results show that Americans consider RVing and Camping almost twice as safe as other types of accommodations such as staying in a hotel. We are also seeing that 66% of Americans consider camping in an RV of little to no risk compared with 38% who feel the same way about flying on a plane to a destination," said David Coletto, CEO of polling firm Abacus Data.

Additional survey insights include:

Compared with typical summer vacations, the likelihood to take a road trip this summer is up 6 percentage points, while intent to fly, stay at a hotel, go on a cruise, or even stay at friend's or family residences are down.

The majority of Americans (52%) consider RVing as one of the only safe travel options during COVID. Michael McNaught, co-founder of RVezy, says, "When the pandemic hit in 2020, Americans turned to road trips, camping, and RVing as a safe alternative to the traditional flights and hotels. When families discovered how safe and convenient it was to explore the great outdoors in an RV, word got around. While safety concerns have pushed a lot of Americans to discover RVing for the first time, it's the lasting memories that bring them back year after year."

2021 may be the Year of the Road Trip. This is how to plan a good one.

From covid safety to scoping out where to stay, these are the new rules of the road

By **Natalie B. Compton**

March 17, 2021 at 2:28 p.m. EDT

Road trips were different in 2020. Last year our advice focused on getting where you were going fast and spending as little time as possible in public spaces, like bathrooms to avoid so-called coronavirus toilet plumes (sorry to bring that up again).

Some of those tips will hold over into 2021. As more people are planning trips again and

getting vaccines to do so safely, “normal” travel may resume later this year. But travel industry insiders are still predicting road trips to be popular, and not just for their utility. People are looking forward to the Great American Road Trip, even as the masses return to flying.

You'll still need to keep the pandemic and typical road trip concerns top of mind. You've heard not to let your gas tank get past a quarter of a tank; now you need to remember to pack extra face masks, too. These are the new rules for road tripping in 2021.

We could be traveling again by summer. This is what to consider before you plan.

Covid safety should still be on your radar

Of course, until the pandemic is fully over, coronavirus will still be a factor in how you travel.

With states lifting restrictions and mandates, you will still have to pay attention to local guidelines on quarantines, mask ordinances, curfews and dining restrictions. Your best resources are the government websites of wherever you are headed, or you can use AAA's COVID-19 Travel Restrictions Map.

Your experience will vary depending on the law of the land, so be prepared to encounter the return of unmasked partying in Florida or, on the other side of the spectrum, bring proof of a negative coronavirus test or quarantine for 10 days if you want to go to Maine.

While you don't have to be hypervigilant about sanitizing every surface you come across, Jessica Malaty Rivera, an epidemiologist with the COVID Tracking Project, recommends focusing on maintaining good hand hygiene, opting for contactless check-in and check-out at hotels when possible, wearing a mask and keeping a healthy distance when around others in public, even if you're vaccinated.

“Right now, not enough people are fully vaccinated for you to do things like take your mask off or not physically distance,” she says.

Malaty Rivera also says travelers should consider getting coronavirus tests if passing through high-risk situations. Keep companies like Curative, which has more than 10,000 testing sites, and Same day Health (with services in 15 states) in mind for cross-country testing needs. You can also visit a destination's health department website for regional options.

There are some rules that always stand, such as making sure you have enough gas and water. Jasmin Shah, a photographer who has driven 15,000 miles since August, suggests downloading your maps offline, particularly as you travel through remote parts of the country.

“There are some lonely roads that you really have to pay attention to signs that say ‘no services for the next 150 miles’ because they really mean no services and no cellphone service,” Shah says.

Linda Jelencovich, a Travel Leaders Network advisor with Super Travel of Palm Beach, recommends people get travel insurance for worst-case scenarios, from trip cancellation to health emergencies. “I always recommend that people take travel protection no matter what, because you never know,” she says. “They could get sick, or something happens and they have to get medevaced back.”

Have a destination in mind, but leave room for improvising You can wander with points of interest in mind, relying on your map app of choice, or choose a tried-and-tested route. AAA has guides you can follow for peace of mind.

Road-trip veterans encourage travelers to have an outline of a trip, or a final destination in mind, as they plan the journey. Know where you'll sleep each night, but avoid planning each day with a rigid schedule to make space for fun or necessary detours.

“Part of what makes getting out on the road fun is that there are some unplanned pieces about it,” says Jon Gray, the chief executive operator of RVshare, an RV rental and listing company. “I think leaving some flexibility in the itinerary makes a lot of sense.”

Throughout the pandemic, travel blogger Sarah Fay has turned to road trips in lieu of international travel. Choosing outdoorsy routes and destinations — with time for detours found on the Roadtrippers app — have been beneficial for her mental health during a year where we were inside more than ever.

“A lot of things can change during covid,” Fay says. “I like the flexibility of having my car to be able to go anywhere and have my own space.”

Plan longer stays ASAP

Gray’s advice for having trip flexibility changes if you’re planning on staying in one place for a while. His tip is to book those longer stops ahead of time. As with last year, camping, RV rentals and national park visits are going to be on the minds of cooped-up Americans opting for outdoor-focused trips.

That’s particularly true if you’re planning to stay in trending places this summer, Jelencovich says.

Think major national parks (Yellowstone, Grand Canyon), coveted camping destinations (lock them in at rec.gov or Hipcamp.co), the Pacific Coast Highway, the Hamptons, Florida and Cape Cod.

Pack with intention

You’ve decided on your road trip; now you need to pack. Where you’re staying will change your packing situation immensely.

When the pandemic hit, Haley Hamblin, photo editor for *By The Way*, and her fiance left their D.C. apartment behind and spent the last year road-tripping around the country, logging 27,000 miles on their Subaru. The couple has camped, stayed in Airbnbs, budget hotels, at friends and family’s homes.

Instead of sticking to suitcases, they use plastic bins to keep life organized. Some hold clothes, camping gear, kitchen equipment (like a cast-iron skillet and a pot for camp cooking) and dry goods. Their cooler is another stackable container that stores perishables.

“It’s easier if everything’s rectangular,” Hamblin says. “Then we do have some stuff that nicely squeezes in between.”

Hamblin says if you’re going to be doing a lot of camping or working on the road, essentials like collapsible five-gallon water cubes, good camping chairs and a Jackery portable power station with solar panels to keep electronics charged are all game changers.

Make sure your vehicle is ready for the trip

If you haven’t been making a regular commute, or your car has been sitting around for a while, consider getting it checked out before you take off.

Richard Counihan, CEO of DigniFi, a site that offers personal auto repair loans, says commonly overlooked car parts are batteries, tires, fluids, belts and sensors. All of these items should “be checked before hitting the road, particularly if you’re going on a relatively long road trip,” he says. “Those are the things that wear out of the vehicle and do need to be checked.”

Cars sitting for a month or more can result in flat spots where the tire meets the pavement, which may impact your car’s stability and control at higher speeds, Counihan says. Also consider outfitting your car with gear for the trip to make your journey more pleasant. Counihan says campers may enjoy extras like car awnings or roof racks to store bikes and extra storage space.

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